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Publications of the

Carnegie Endowment for International Peace

Division of Economics and History

John Bates Clark, Director

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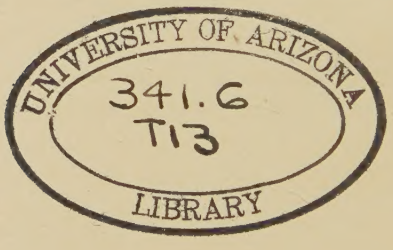

THE RUMFORD PRESS, CONCORD

NOTE BY THE DIRECTOR

The plans of the Division of Economics and History of the Carnegie Endowment for International Peace have been transformed by the World War. Problems now calling for study transcend in importance those with which this Division has been dealing and material for research and record so far transcends any that was formerly available that it will demand almost exclusive attention for some years to come. A new world has evolved suddenly out of the world which we knew and the transformation extends to the foundations of government and of economic life.

The process of warfare itself is now so unlike that of former days that many military rules of the past have gone into the scrap basket. The late war ended when its deadliest tools had barely been brought into action. The peoples have fought as they had worked, by machinery, mechanical and chemical engines of destruction have decided the result and will decide in like manner the result of all wars of the future. Machine shops and chemical laboratories will so largely determine what armies shall win that fighting strength will be as much a matter of available capital and of science in applying it as of numbers of troops and strategy in directing them. It is safe to say that the death dealing arts and instruments will far surpass in destructiveness those which made the late war so deadly, and to a soldier of the future the order to march into a cloud of poisonous gas and a whirlwind of missles will resemble an order to plunge into the rapids of Niagara. This is one central and obvious fact which the war has taught us and it has many corollaries, some of which have to do with the increased costs of war and the importance of the particular resources that make a nation powerful for offense and defense; but there are less conspicuous economic facts which are more fundamental, since they may determine where and when, if at all, wars shall hereafter occur.

Causes of warfare are always partly economic and those which incited the recent one were mainly so. The business plans of a powerful state reached to the ends of the earth

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and so crossed and interlaced the claims of other states that some writers, then and afterwards, pronounced the war inevitable. If we assume a settled purpose on the part of such a state to encroach on the rights of others, we may say that it doubtless was inevitable. The victory of the defending countries has saved them from an immediate and intolerable domination, but it can not be taken as an assured fact that similar attempts will never again be made. The economic inducement continues and the means may at some time be forthcoming.

Within the several states war has democratized industry, giving to labor an increase of control—a change that if continued will entail momentous consequences; but still greater effects have been produced on the relations of states to each other. The world as a whole has changed more than its component parts and the new relation of the parts to one another is the critical element in the situation. The great increase in the economic functions of governments is one cause of this condition. Within the great international community in which the several states are units extensive economic functions have gravitated into the hands of governments and caused them to face each other as business rivals and to deal with each other in a multitude of ways in which the merely self-seeking policy of private business is intolerable. Power to invoke principles of justice and international law as interpreted by a competent court has become an indispensable means of allaying strife and this fact exalts to supreme importance the high court of nations which has just been established. It magnifies also the importance of the economic facts and principles with which the law itself will have to deal. It is not merely individual men or private corporations who now meet each other in the rough and tumble of a world-wide mart but states themselves, each representing its own population and seeking to foster its interests as a zealous and faithful agent. The chances of friction that are inherent in ordinary commerce inhere today in vast international transactions and will increase in the measure in which the intercourse grows. All this means a

great increase in incentives to warfare, on the one hand, and in the motives for preventing it, on the other. Private commerce unites more than it separates those who participate in it, and it remains to be seen whether international commerce will act in the same way; but, in view of what modern war means, the human race will deserve to perish, and much of it will probably do so, if the forces of strife are allowed to get the upper hand. Whether they will or not—whether the recent economic changes will tend to reduce warfare or to increase it—depends on the ability of nations to create and maintain the instrumentalities that in the new state of the world are necessary.

Certain it is that the feeling which prevails today, the world over, is not one of security. The dread of further war is greater than it was before 1914. In some areas war still prevails, in others peace is held by a precarious tenure and in all it can be firmly established only by conscious and intelligent action by the states themselves. Mere exhaustion holds war dogs temporarily in leash, but it will take more than that to tame them as they must be tamed if peace is to endure.

We here confront a wide difference between the several states in comparative desire for peace and disposition to maintain it. One portentous fact is the grim determination of Russian communists to extend their system by crude force from state to state. Bolshevism is government by the few and largely the bad masquerading as government for and by the people. In its mother country, Russia, the economic measure by which it began its career was confiscation of private wealth—in itself an ultra-democratic measure. If this had brought in a true communism, it would have been a ruthless and unjust measure for creating a peace-loving state. A just and orderly democratizing of industry in the several states would give new strength to the forces of peace, and it would be highly improbable that any state so influenced would try to extend its system over foreign countries by military invasion. Democracy, socialism, communism and bolshevism all appear in the aftermath of the war. The first of

them makes for future peace and so does even the conservative element in the second, while all else in the series means certainty of civil strife and danger of international war.

The fact that during the war governments had to take on innumerable functions that were formerly in private hands has lent an impetus to socialism and to the perverted growths that have accompanied it, and it has created a new international system the meaning of which is profoundly significant, though he who runs can not so easily read it. There are dangerous features in the system which the war evoked and, happily for mankind, there are available safeguards which were evoked with them and need to be retained if human effort can do it.

By a compulsion that there was no resisting, the war forced the nations of the Entente into economic cooperation with each other. Commissions centering finally in the Supreme Economic Council adjusted in a harmonious way questions that would otherwise have led to rivalry and conflicting action in purchasing war materials, securing ships, apportioning food, controlling railroads, financing the war and doing a multitude of other things with the one common purpose of victory. The special compulsion of the struggle is over, but it has left an aftermath of issues grave enough to make peace insecure unless something equivalent to the Supreme Economic Council survives in full efficiency. The agency that did so much to win the war can do so much to prevent another one, but to that end it will have to be guided by economic principles and it is a saving fact that these still survive. The war has not abolished the law of demand and supply, though governments may forget it. In the coming era they must build better than they now know. Economic knowledge must either go in advance of action and prevent disaster or follow action and be learned from disaster. Beyond computation is the importance of attaining the knowledge and using it when evil impends and prevention is possible.

JOHN BATES CLARK,
Director.

NEW YORK,
September 27, 1920.

PREFACE

Upon my return from the conference at Berne, I requested Mr. Y. Takata to investigate the system of conscription and its economic effects, because I regarded him as a scholar well versed in sociological, statistical and economic subjects. He is certainly well fitted for such work. After two years' hard labor he has completed this great work. Many were the difficulties with which he was confronted. There were but few books that he could rely upon. Nor were there any official statistics to furnish him with accurate information. To trace the historical development of the system of conscription, he had no other way than to study the successive changes in the conscription law. For the economic effects of the system, the only material that he could work upon was the *Annual Statistics*. He had to visit different Divisions, in order to make personal investigations concerning the economic effects of this system. Mr. Takata certainly deserves our admiration, as he now lays before us the result of his laborious work. Special mention should be made of his painstaking collection of new material and of his arguments based upon it.

(1) *Concentration of Soldiers in Towns* (Part II, Chapter III). As there was no available material concerning the concentration of soldiers in towns, he had to resort to an indirect way of using such information as came to his notice. Such an indirect method lacks in force of demonstration. We fail to do him justice, however, if we do not perceive his fair and candid treatment of the materials he managed to collect.

(2) *Formation of Military Towns* (Part II, Chapter III). As to the formation of military towns, the author, starting his work with a general survey of the places where regiments are quartered, proceeded to a particular investigation of the town of Zentsuji, which was but a little village previous to the establishment of a division there. He made a visit to this town and collected material. His idea was that this

town was typical of the growth of military towns. Zentsuji is of course only one instance out of many such towns, but valuable inference is possible from the particular study of this typical town, which will surely give us light on the development of others.

(3) The amount of consumption among soldiers is now before us in definite figures, as the result of the author's personal investigations at the Divisional or Regimental Offices at Fushimi, Osaka, Kurume, Utsunomiya, Sendai, Hirosaki and Asahigawa. In gathering these statistics, he entered an entirely new field.

(4) The state expenditure for the training of soldiers and the management of accountants' business were also subjects of the author's personal investigation at the respective offices.

(5) Personal investigation was also made by the author concerning the social classes to which soldiers in the active service belong. Information was obtained directly from the Regimental Office at Saga, and the City Office of Kyoto. A new field of study was thus opened by him.

(6) Another new field was opened concerning the effect of the system of conscription upon commercial employment by the author's direct investigation of the books at the Headquarters of the Sixteenth Division, and of the Asahigawa Division.

I was glad to give some suggestions about the collection of material and the construction of arguments, but have done little toward the completion of this laborious work. It is the result of the author's untiring efforts. We can hardly say that it is a complete and perfect work, when we realize the difficulties that lay before the author. I am proud of the fact that the author has opened a new field in the study of the subject, and also that the work has been done under my supervision.

GOTARO OGAWA.

KYOTO, JAPAN,
April, 1916.

EXPLANATORY TABLES

Value of Japanese Currencies

Japan adopted the gold standard system in 1871, but the inconvertible paper money became principal currency a few years later. In 1886 the paper money became convertible into silver and after that date the Japanese currency system was the silver standard *de facto*, until on October 1, 1897, the gold standard system was legally adopted. The figures necessary to ascertain the value of Japanese currencies are given below:

(1) 1 gold *yen* (according to Coinage Law of 1871) contains 1.5 gramme pure gold.

(2) 1 gold *yen* (according to Coinage Law of 1897) contains 0.75 gramme pure gold.

(3) 1 silver *yen* contains 24.261 gramme pure silver.

(4) The value of 1 silver *yen* in the English currency (according to the demand rate of exchange on London in the average of the year) is as follows:

	s. d.		s. d.		s. d.
1874.....	4.02.0	1882.....	3.08.8	1890.....	3.04.5
1875.....	4.00.8	1883.....	3.07.9	1891.....	2.02.6
1876.....	3.11.2	1884.....	3.07.9	1892.....	2.10.5
1877.....	3.11.7	1885.....	3.06.0	1893.....	2.06.7
1878.....	3.09.4	1886.....	3.03.2	1894.....	2.01.2
1879.....	3.08.0	1887.....	3.02.0	1895.....	2.01.3
1880.....	3.08.9	1888.....	3.01.0	1896.....	2.02.0
1881.....	3.08.4	1889.....	3.01.1	1897.....	2.00.4

(5) The value of 1 *yen* of paper money in the English currency (calculated on the basis of the above mentioned exchange rate and the quotations of the silver price in the Tokyo Exchange in the average of the year) is as follows:

	s. d.		s. d.		s. d.
1877.....	3.10.1	1880.....	2.06.4	1883.....	2.10.7
1878.....	3.05.6	1881.....	2.02.1	1884.....	3.04.3
1879.....	3.00.3	1882.....	2.04.5	1885.....	3.03.7

(6) 1 *ryō* (unit of value of the old currency system) was declared in the Coinage Law of 1871 to be equal to 1 *yen*.

Chronological Table

Meiji 1st	1868 A. D.	Meiji 15th	1882 A. D.
" 2d	1869 "	" 16th	1883 "
" 3d	1870 "	" 17th	1884 "
" 4th	1871 "	" 18th	1885 "
" 5th	1872 "	" 19th	1886 "
" 6th	1873 "	" 20th	1887 "
" 7th	1874 "	" 21st	1888 "
" 8th	1875 "	" 22d	1889 "
" 9th	1876 "	" 23d	1890 "
" 10th	1877 "	" 24th	1891 "
" 11th	1878 "	" 25th	1892 "
" 12th	1879 "	" 26th	1893 "
" 13th	1880 "	" 27th	1894 "
" 14th	1881 "	" 28th	1895 "

Chronological Table—(*Continued*)

Meiji 29th	1896 A. D.	Meiji 41st	1908 A. D.
" 30th	1897 "	" 42d	1909 "
" 31st	1898 "	" 43d	1910 "
" 32d	1899 "	" 44th	1911 "
" 33d	1900 "	" 45th / Taisho 1st	1912 "
" 34th	1901 "	" 2d	1913 "
" 35th	1902 "	" 3d	1914 "
" 36th	1903 "	" 4th	1915 "
" 37th	1904 "	" 5th	1916 "
" 38th	1905 "	" 6th	1917 "
" 39th	1906 "		
" 40th	1907 "		

Weights, Measures and Money

With English, American, French and German Equivalents

Japan	Great Britain	U. S. of America	France	Germany
Ri = 36 *Chō* = 2,160 *Ken* = 12,960 *Shaku*....	2.44030 Miles	2.44029 Miles	3.92727 Kiloms.	3.92727 Kiloms.
Ri (Marine).....	1.15152 Miles	1.15151 Miles	1.85318 Kiloms.	1.85318 Kiloms.
Square *Ri*.....	5.95505 Sq. Miles	5.95501 Sq. Miles	15.42347 Km. Carrés	15.42347 Quadrat Km.
Cho = 10 *Tan* = 100 *Se* = 3,000 *Bu*.....	2.45064 Acres	2.45062 Acres	99.17355 Ares	99.17355 Ar.
Tsubo = 10 *Gō* = 100 *Shaku*....	3.95369 Sq. Yards	3.95367 Sq. Yards	3.30579 Centiares.	3.30579 Quadratm.
Koku = 10 *To* = 100 *Shō* = 1,000 *Gō* = 10,000 *Shaku*..	4.96005 Bushels	47.65389 Gallons (Liq.) / 5.11902 Bushels (Dry)	1.80391 Hectolitres	1.80391 Hectolitres
Koku (Capacity of ship).....	1/10 of one Ton	1/10 of one Ton	1/10 de Tonne	1/10 Tonne
Kwan = 1,000 *Momme* = 10,000 *Fun* = 100,000 *Rin*...	8.26733 lbs. (Avoir.) / 10.04711 lbs. (Troy)	8.26733 lbs. (Avoir.) / 10.04711 lbs. (Troy)	3.75000 Kilogs.	3.75000 Kilogs.
Kin = 160 *Momme*....	1.32277 lbs. (Avoir.) / 1.60754 lbs. (Troy)	1.32277 lbs. (Avoir.) / 1.60754 lbs. (Troy)	0.60000 Kilogs.	0.60000 Kilogs.
Yen = 100 *Sen* = 1,000 *Rin* = 10,000 *Mō*.....	2.0.582 s. d.	0.4984 Dollar	2.583 Francs	2.0924 Marks

CONTENTS

Part I—Historical Survey of the System of Conscription

CHAPTER		PAGE
I	Introduction	1
II	From the Restoration to the Satsuma Rebellion	8
III	From the Satsuma Rebellion to the Sino-Japanese War	19
IV	From the Sino-Japanese War to the Russo-Japanese War	44
V	From the Russo-Japanese War to the Present Time	49
VI	Conclusion	57

Part II—Economic Effects of the System of Conscription

I	Introduction	73
II	Effects on Population	76
III	Effects on the Development of Towns	87
IV	Effects on Employment	108
V	Effects on Labor	136
VI	Effects on Productivity	160
VII	Effects on Consumption	186
VIII	Social Effects	223
IX	Conclusion	236

Index 239

PART I

HISTORICAL SURVEY OF THE SYSTEM OF CONSCRIPTION

CHAPTER I

INTRODUCTION

Before entering upon a historical investigation of the system of conscription, let us, first of all, glance at the origin of the conscription law.

It was in January, 1873, that the law was promulgated, being the first of its kind in the history of Japan.

The feudal system that had been on the verge of destruction at the time of the Meiji Restoration (1868) was entirely demolished by the law promulgated in 1871, which abolished the clans and established the prefectures, and thus secured the primary aim of the Restoration. With the abolition of the old system, each clan had to disband its own troops, upon whom the responsibility, both defensive and offensive, had rested. The nation could not, however, do without some sort of military preparation, even for a day. It had to find some other system that would replace the regular service of the *Bushi*.

At the time of the Restoration, the nation was busy absorbing the Western civilization in all respects; any institution, if Western, was adopted or imitated without discrimination. Turning our attention to the military systems of Europe, we find the conscription system adopted in France as early as the Revolutionary year of 1793, and in Prussia, twenty years later. By the year 1866, we find other nations following their example in the adoption of the system, which has thus become a method of completing military service, common to all the European countries. It was natural that the Japanese authorities, who were in pressing need of a new military system, should follow the European example.

The adoption of the system was, however, not an easy matter. Strong objections were raised against this new system, for it was not compatible with the feudal spirit, with which the whole people were thoroughly saturated. The idea of

taking into service those who were not of the military class (*Bushi*) was the point of attack by not a few of the higher functionaries and it was only after the greatest efforts on the part of the military authorities that they yielded to the necessity of conscription. Thus the foundation of the conscription law was now laid. Needless to say, Japan had to vary from the Western system, in order to suit the actual conditions of the country.

The Imperial mandate concerning conscription, issued on the 28th of November, 1872, reads in part as follows: "The military system of the West is thorough and detailed, for it is the result of the studies and tests of centuries. But the difference of government and geographical conditions warns us against indiscriminate adoption of the Western system." The very idea of military service as one of the important duties of a people has come into existence under the influence of Western thought and institutions. This is clearly indicated in the same mandate:

> Everything in the universe has its tax to pay. The tax a people have to pay is for the national use. A people must then serve their country with a whole heart. The "blood-tax," so-called among the Western peoples, means their living blood offered to their country. When a country is threatened with dangers, her people must of course suffer from them. Whole hearted service to one's own country is therefore the basis of preventing calamity. If there is a nation, there must necessarily be armaments, and armaments imply military service by the people. These considerations make it clear that military preparations are a principle not artificial but natural. As to the method or system of putting it into operation, it is of utmost importance to interpret rightly the actual tendencies of the times.

It would, however, be too rash to say that our conscription law is nothing but an imitation of the Western system. We must not overlook one condition that was very effective in bringing about the adoption of this system, namely, the national spirit at the time of the Restoration.

The new Meiji Era was the result of the great movement for the restoration of the Imperial family to power. There had no doubt been many and various conditions that led to this result, but no one questions the patent fact that the primary aim of the whole movement was the restoration of the Impe-

rial power. The exclusive possession of political power on the part of the military class having been the cause of the decline of the Imperial power, the first step toward its restoration was the destruction of the military class and of feudalism. In order to maintain the restored Imperial régime, it was necessary to take such measures as would leave no room for the reappearance of the causes of the decline. Hence, the pressing need of destroying the exclusive military class and all other remains of the feudal system. There was theoretically no necessary connection between the decline of the Imperial power and the rise of the military class of feudalism, and yet the people were firm in the belief that there was such a connection between them, basing their belief upon the events that had actually taken place in the past.

The best way of abolishing the military class was to return to the earlier condition in which there had existed neither the military class nor the military institution that supported it. In other words, the restoration of the Imperial power demanded the restoration of the old military institutions, and the military institution that was demanded was the conscription system. On the other hand, the accomplishment of all the plans for the Restoration came to mean, virtually, the adoption of the military system of Europe. We thus plainly see that the Restoration became a twin sister of the progressive movement, both of them being the children of the times. This was the reason that our conscription system was brought into existence in a comparatively easy manner. Let it be mentioned here that the authorities were of course aware of the difference between our military institutions in earlier times and those of modern Europe. Hence, the words, "complementing our ancient military system with the excellences of the Western, in order to meet the national emergencies with a proper army and navy."

That the new conscription law bears a restorative meaning will be seen from the preface of the Imperial mandate, already referred to and from that of the said law. In the former, issued on November 28, 1872, we find it stated as follows:

In ancient times when the prefectural system was in force, the country was protected by the militia enlisted in army corps, and there was no distinction of status between soldiers and farmers. It was in the Middle Ages when the military power was monopolized by the military class that this distinction came into being and formed the basis of the feudal system. The Restoration in 1868 was truly a great event that has seen no equal for more than a thousand years. We who live in the new era must take necessary steps in regard to an army and navy.

So much from the preface; now from the mandate itself of the same date.

According to our ancient institutions, there was no one in the country who was not a soldier. In cases of emergency, all the able bodied men were enlisted in the army, under the command of the Emperor. When the service was over, they returned home, resuming their duties as farmers, mechanics, or merchants. They were indeed very different from the so-called Bushi (knights) of the later times, who always wore swords, led an easy life, and were arrogant and shameless, and murdered innocent people with impunity. Since Uzuhiko was appointed by the first Emperor Jimmu the prefectural governor of Katsuragi, the process of completing armaments has been going on, first the army corps, then the Imperial and frontier guards, and still later (724–748 A. D.) "the six generals and two garrisons." It was after the decline of the Imperial power during the course of the Hogen and the Heiji Era (1156–1159 A. D.) that the military power fell into the hands of the military class. And it was then that the country was divided into clans and the people into soldiers and farmers. In later times all these institutions were thrown into a state of confusion, thereby causing innumerable grievances. In the Meiji Reformation, the lords of the different clans returned their fiefs to the Emperor, and order was brought out of confusion by the restoration of the prefectual system. The hereditary pensions, with which the idle knights had been favored by their feudal lords were reduced and the traditional privilege of wearing swords was taken from them. The era of freedom is now gradually dawning upon the people. The hereditary distinction between the soldier and the farmer will be done away with.

The necessity of depending upon a national army is thus emphasized in the mandate. At the same time, in the preface of the conscription law issued in November, 1873, the reason for adopting such a conscription system as would avoid the weaknesses of the militia but would be in accord with our ancient military system, is clearly stated. In the preface it is stated that—

There are two kinds of militia, namely, those whose enlistment is compulsory and those who volunteer for service. The former usually serve in the army, but such of them as are used to a maritime life are put into the naval service. The latter, whose service extends over a certain number of years, form a picked troop well versed in the various military arts, and are thus very efficient. But the latter are not free from some defects that may arise in the long run. This is the reason why the former kind of service is preferred to the latter.

We have seen that our conscription law had a twofold origin, the national and the Western. Now, if it be asked which is the more important, it is not difficult to answer that the institution of the law itself was due to the restorative spirit of the Reformation. Even if a conscription system was not then in force in Europe, or not known to us at all, there is no doubt that our military system had to be based upon conscription. For the military class and the feudalism, that had become so unpopular, had by all means to be replaced by some other institutions. And, as we have already seen, the volunteer system that made possible the foundation of a military class could not be adopted.

The only system now remaining was the ancient conscription system, which was aimed at by the reformers. The motive of instituting some sort of conscription system was thus internal, and not foreign. But, when we look at the content of the new system, we find it mainly Western. The content is certainly not a copy of our ancient system. Our military system was, at the beginning of the Meiji Era, especially under the French influence. Previous to this, in the Keio Era, a French officer had already been employed as an advisory councilor. Masujiro Omura, the first and greatest advocate of conscription at the beginning of the Meiji Era, was determined to imitate the French system, and his proposal to invite some French officers was approved by the Emperor. It was Omura who laid the foundation of the conscription law, upon which Aritomo Yamagata constructed the system in detail. It is but natural that our conscription law bears the Western, and especially the French, coloring.

We have thus far studied the circumstances in which our conscription law originated. Let us now proceed a step further and follow the changes of its content in the succeeding epochs. We shall see how these changes have been made, how the number of conscripts has varied, according to the changes in our military system, and what circumstances have caused all these changes.

CHAPTER II

FROM THE RESTORATION TO THE SATSUMA REBELLION

Our field of investigation extends over the period beginning with the Reformation and ending with the Satsuma Rebellion. We find conscription already in the first year of Meiji (1868). Five years later (1873), the conscription law was promulgated. Few changes have been made during these years. The changes made in this law, in this incipient stage, the number of men enlisted, according to this law and the reasons for the changes both in form and content, will now be the subjects of our study.

Changes in the Conscription Law

Enlistment before 1873

Although the promulgation of the conscription law was an event that took place in January, 1873, yet troops had already been requisitioned on different occasions, in accordance with Imperial ordinances. The germ or incomplete conditions of the law had already existed. When the nation entered upon her new era in 1868, a requisition order was issued to the feudal lords on the 19th of the intercalary month of April of the same year. The gist of the order was as follows:

Ten men of whom three for the present, per 10,000 *koku* (about five bushels) of stipend. To be maintained within the Imperial domains (*Kinai*). The garrisoning of the nine Imperial gates and other places, to be ordered later.

Fifty men, per 10,000 *koku*. To be maintained in each county.

Three hundred *ryō* a year, per 10,000 *koku*. To be paid in three payments, for the wages of the men.

The above is now ordered to all the fief possessors of the Empire, in order to organize an army.

In another ordinance issued on the 24th of the same month, we find—

Concerning the ordinance issued the other day, for the requisition of men and war funds, it should be understood that the men are to be picked from among

the people, seventeen or eighteen to thirty-five years of age. The service extends over three years.

For the present, the men are to be equipped with muskets, bedding and other requisites, by the fief possessors. . . .

The Imperial Court will be responsible for the furnishing of uniforms, salaries and board.

As to the troops maintained in the countries, they should always be held ready for the Imperial requisition.

It was on February 10 of the next year that the following ordinance was issued, ordering the release from service, in order to reconstruct the military system:

Concerning the requisition of arms previously ordered, let it be understood that the men are now to be released for the present, a new arrangement of the military system being needed as a result of the subjugation of the Northeast.

On February 10, 1870, another order was issued as follows, concerning the organization of the army and conscription:

Infantry.—One battalion shall consist of sixty men, and each company of two platoons. . . . Different officers, together with the noncommissioned, are not included in the number.

Artillery.—A squad shall consist of two cannon, three squads forming a corps.

The age of men should be eighteen to thirty-eight, those who have been in service are excepted, if they are strong in body.

Men are requisitioned at the rate of one platoon per 10,000 *koku* of stipend.

It is forbidden to choose men outside the military class and the retainers. When the ratio of the platoon per 10,000 *koku* is not obtainable, this must be reported to the Military Department, for further instructions.

As will be seen from the above, the common people were yet outside the scope of conscription. Those who were not of the military class and the retainers were not entitled to serve in the army, nor had they a duty to do so. Our military system was then in the stage of transition to a general conscription system. The Imperial Court saw the urgent need of a new system. As the necessary preparation for the establishment could not, however, be made suddenly, the Conscription Regulations were issued, as a temporary arrangement, on November 13 of the same year (1870). They were in force until the drafting and promulgation of the conscription law. In the regulations is found a proclamation, part of which runs as follows:

We are now instructed by the Imperial Court to issue these regulations concerning the conscription in the following separate sheet.

It has already been ordered that men be requisitioned at a certain ratio. Arms are of urgent necessity for national defense, on which the Imperial prestige takes its rests. It is the intention of the Emperor to study the history of the military organizations of the world and thereby to institute a new system of conscription. Meanwhile, these regulations should be observed, in choosing able bodied men from the military class and the common people, beginning with the first month of the next year. The number to be reported to the Osaka Office of the Department is five men per 10,000 *koku*. It should be understood that the standing troops already in existence are to be maintained, as before, for local defense.

Article I. Men who are eligible must be twenty to thirty years of age. They must be strong in body and more than five feet in height. Those are exempted from service who do not come up to the standard of the medical officers of the department.

Article II. The term of service shall extend over four years. To those who have served the term, donations will be granted. They are forbidden to return home during the term, but those who desire to remain after the expiration of the time will be permitted to perform the service again.

Article IV. Pensions will be granted to those who are disabled for life while in the service.

Article V. Uniforms and boarding will be furnished by the department, which will also pay salaries. As to the traveling expenses of the men to Osaka, they shall be defrayed by the local governors. The expenses back to the provinces, when discharged, will be paid by the department.

Article VI. When the men selected are found ineligible by medical officers, the local governors shall secure substitutes.

When we see it stated in the regulations that the common people were eligible as well as those of the military class and the retainers, and that a definite number of eligibles should be selected, it is now plain that conscription was already in existence. A step further, and it would be the conscription law enacted in 1873.

The Conscription Law Issued in 1873

On November 28, 1872, it was declared that a law would soon be enacted, according to which all the people should be made eligible for service. The first conscription law was promulgated on January 10, 1873, which consisted of a statement of the principles that relate to the organization of an army, and general rules therefor, together with five chapters. The principles were divided into three clauses, the first clause treating of the standing army, the second of the reserves and the third of the national army. The first clause contained

six by-rules, the second those rules concerning the first and second reserves and the third no detailed provisions. Of the five chapters, the first consisted of twelve paragraphs concerning the conscription officers and their duties; the second, of four paragraphs concerning the inspection tours of the superintendents and the preparations to be made previous to their visits; the third, of twelve paragraphs concerning the regulars and discharged men; the fourth, of seven paragraphs concerning the examination of conscripts; and the fifth, of seventeen paragraphs relating to the drawing of lots and to the examinations in penmanship and arithmetic.

Setting aside those parts that relate to the business of conscription, let us now give general descriptions of the remaining provisions of the law.

1. Service as a National Duty.—All the male subjects of the Empire, seventeen to forty years of age, are available for service and are to be registered as such (see "General Rules" and "The National Army, Clause III"). They are to serve either in the army or the navy (see Clause II).

2. Kinds of Service.—The army consists of the regulars, the reserves and the militia, the service and the duties varying accordingly. The regular or actual service is obligatory upon men who are fully twenty years of age, from whom the requisite number is obtained by drawing. Their term is three years. The reserve service is obligatory upon those who have served as regulars, and is divided into the first reserve service and the second reserve service.

Those who have served as regulars are enlisted in the former service, and those who have served as first reserves for two years are enlisted in the latter service, which extends over another two years. The national army service is obligatory upon all the males of the Empire, seventeen to forty years of age, who are exempted from the regular and the reserve service.

3. Specialization in Service.—Both the regulars and the reserves are distributed, according to stature, into five classes: artillery, cavalry, infantry, engineering and commissariat.

Men of all these classes are to be garrisoned in the respective localities from which they are drafted.

The regular service extends over three years, as prescribed. But in peaceful times, those are discharged who have served more than two years, and proved to be skilful in military arts (by-rule 6). Those selected for noncommissioned officers must serve for more than seven years, thereby being exempted from reserve service (by-rule 5). Men are paid daily wages while in service and their uniforms, etc., are furnished by the government. Those excellent in body and character are to be transferred to the Imperial Guards (by-rule 2). Those who are in the reserve service may engage in ordinary business at home. The first reserves are to be called to join the army on declaration of war. They are also to be called to their respective barracks once a year, in order to review their arts, the expenses being defrayed by the state. They are forbidden to go out of their jurisdiction, without permission, which will be given so far as it does not interfere with the term for review. The second reserves are to be called out when the whole nation needs to be armed, but may remain at home, provided they will inform their headquarters of their whereabouts whenever they leave the jurisdiction. They are, however, to return to their own district, when the first reserves are called out.

Even though the term for the different services above specified has expired, it must be prolonged in cases of emergency.

Those who belong to the unorganized militia are to be enlisted in an army, for territorial defense, when the whole nation is to be armed.

In order to fill up the vacancies in the standing army, the number of men, not exceeding one-half of the yearly conscripts for the said army, is requisitioned by a drawing (Ch. 5, par. 4). This supplementary service extends over one year. The term was shortened to ninety days by *Dajokan fukoku*, State Order No. 17, issued in 1875.

Those who have discharged this supplementary service

may go home and remain there, under the same conditions as those who were exempted from service by a drawing. Those who are exempted from service by a drawing must stay at home, for they may be required to enter barracks, in order to fill up vacancies in the regular army. The order of entering barracks in such cases is decided by lot. When those who were ordered to be in this supplementary service do not receive notice to enter barracks before the expiration of a full year after the order (before the nineteenth day for the regulars, according to the state order above), they shall take it for granted that their names are dropped from the list (Ch. 5, par. 2). If transferred from the supplementary to the regular list, they are to serve the term of three years, beginning with the day on which the lot was drawn (the first day for regulars to enter barracks, according to the cabinet order above).

4. Exceptional Cases.—No provisions.

5. Rejection and Exemption.—Criminals sentenced to punishment above penal servitude are forbidden to serve in the army (Ch. 3, par. 9).

State Order No. 403, issued in 1873, adds another condition, that of *Jozoku* (expelled from the *Bushi* class). No exemption from service.

6. Postponement of, and Exemption from, Enrollment.—The postponement takes place in the following two cases: (a) that of sickness at the time of physical examination, in which case the enrollment is postponed to the following year, if the disease is found to be temporary in the medical examination made at the home of the patient in question; and (b) that of the death or serious sickness of either of the parents. In case of death, the enrollment is postponed one year, when the period of mourning for three weeks has not yet expired. In case of sickness, it is also postponed for another year, when sickness or other grave circumstances at home make it impossible for enrollment. In each of the cases specified, the men in question are to present a detailed statement authenticated by the census officer concerned (Ch. 3, par. 6).

The following are excused from enrollment, and exempted from all other services, except that of the national army (unorganized militia):

(1) Those below five feet and one inch in stature (Ch. 3, par. 1).

(2) Those congenitally weak, inveterately diseased, or deformed (Ch. 3, par. 2).

(3) The governmental or prefectural officials and semi-officials (Ch. 3, par. 3).

(4) Those training for military or naval service, and living in military or naval schools (Ch. 3, par. 4).

(5) Students specializing in the public schools, for service in the educational, the engineering, or the colonial department, those studying abroad, and those studying medicine and possessing a certificate for residence, or a license in a certain branch of medicine, given by government professors (Ch. 3, par. 5).

(6) Heads of families (Ch. 3, par. 6).

(7) Heirs and lineal grandsons (Ch. 3, par. 7).

(8) The only son and grandson (Ch. 3, par. 8).

(9) Those attending to home affairs, in place of father or elder brother, who are sick or otherwise disabled (Ch. 3, par. 10).

(10) Those actually adopted as sons (Ch. 3, par. 11).

(11) Brothers of those who are in service (Ch. 3, par. 12).

(12) Those presenting their request, with the "Substitute fee" of 270 *yen*. The fee must be paid to the Administrative Officer of the district, who will forward it to the Military Department through the prefectural offices, during the month of April (Ch. 3, par. 15).

Those who draw blank lots, and those supplementary reserves who are not called out within the period prescribed, are to be dropped from the list.

7. Rules for Punishments.—Those who incorrectly state their age, the existence of parents, etc., are guilty of deception. Those officials who sign incorrect statements concerning these things are guilty of carelessness. Those who conceal

information about them are guilty of gravest offenses. All of these shall be punished under the laws newly enacted.

From 1873 to the Satsuma Rebellion

A somewhat detailed description has now been given of the conscription law issued on January 10, 1873. Slight amendments have been made in the law by State Order No. 403 (1873), and by State Orders No. 17 (1874), No. 17 (1875), and No. 62 (November 5, 1875). Of these amendments, that made in State Order No. 17 (1875), is of some importance. It relates to two points. The term for the supplementary reserves to live in barracks that had extended over one year, reckoning from the day on which order was issued, was shortened to ninety days, reckoning from the day on which the regulars enter barracks, while the term of the supplementary service itself that had extended over three years, reckoning from the day on which the lot was drawn, was changed to a term of three years, reckoning from the day on which the regulars enter barracks.

Statistics of Conscription

Increase of the Number of Army Corps

As the number of conscripts is determined by that of the army corps, which vary according to the organization of the army, let us first see what changes have taken place in the number of army corps.

Disregarding the army corps previous to 1872, since the establishment of the six garrisons in 1873, at Tokyo, Sendai, Nagoya, Osaka, Hiroshima and Kumamoto, instead of the four garrisons that had existed previously, the number has been as follows:

Infantry, 14 regiments
Cavalry, 3 regiments
Artillery, 18 sections
Engineering, 10 sections
Commissariat, 6 sections
Coast Artillery, 9 corps

Full force in peace, 31,680 (the actual number was only 12,723 in 1873)
Full force in war, 46,350
In addition to the above, some Imperial Guards

In 1875, the full force in peace was decreased to 31,440, although the number of corps remained the same. It was in the same year that a colonial conscription system was established, according to which the colonial governor of Hokkaido organized an army, by calling out those of the *sumurai* class in the vicinity. The organization of the Imperial Guards also took place in the same year, and was constituted as follows:

Infantry, 2 regiments (4 battalions)	Engineers, 1 section
Cavalry, 2 battalions	Commissariat, 1 section
Artillery, 1 battalion	Full force in peace, 3,880

There was no change in the number of army corps until 1879.

Number of Conscripts

We can not ascertain what was the actual number of conscripts drafted during this period. The full force was, however, as follows:

Year	Conscripts	Year	Conscripts
1873	10,560	1876	10,480
1874	10,560	1877	10,679
1875	10,480		

The foregoing figures are based on the following tables:

NUMBER OF CONSCRIPTS (1873)

Year	Conscripts		Total
Seventh year	10,560	Second Reserve	21,120
Sixth "	10,560		
Fifth "	10,560	First Reserve	21,120
Fourth "	10,560		
Third "	10,560	Standing Army	31,680
Second "	10,560		
First "	10,560		

THE NUMBER OF CONSCRIPTS (1875)

Year	Conscripts		Total
Seventh year	10,480	Second Reserve	20,960
Sixth "	10,480		
Fifth "	10,480	First Reserve	20,960
Fourth "	10,480		
Third "	10,480	Standing Army	31,440
Second "	10,480		
First "	10,480		

The figures for 1877 are based upon the order issued by the Army Department, by which a special arrangement was made for that year alone.

Proportion of Conscripts to Population

REGULARS AND CONSCRIPTS PER 1,000 OF POPULATION

Year	Population	Regulars	Per cent	Conscripts	Per cent
1873	33,300,675	10,560	.317	14,880	.447
1874	33,625,618	10,560	.314	14,880	.443
1875	33,997,449	10,480	.308	14,744	.434
1876	34,338,404	10,480	.305	14,744	.429
1877	34,628,328	10,679	.308	14,537	.419

REASONS FOR THE CHANGES

The changes in this period were determined primarily by the dispute between the advocates of conscription and those who were opposed to it on the ground that the common people would lower the standard of soldiership. It was an idea very common among the authorities during the Reformation that those who were not the descendants of the military class could not organize a strong army, that the commons were not qualified for the protection of the Empire. It was on this account that the authorities did not enlist the commons in the army, in spite of the official announcement concerning conscription made in February, 1870. In August of the same year Aritomo Yamagata (now Prince Yamagata) returned from his inspection tour through Europe. He pointed out that they were mistaken in the above view, and prevailed upon them to adopt the French system. On November 13 of the same year we find "Regulations Concerning Conscription" issued and enforced. At a certain age all had to take the physical examination, whether commoners or of the military class. But these regulations were only temporary in their nature. Nor did the people at large yet come to recognize the obligatory nature of service. The regulations were not sufficient for the completion of arma-

ment, for which the conscription law was enacted in 1873. It was completed in the same year, that of the Imperial Guards being completed in 1875. Those changes that have been made in the law in the succeeding years are of comparatively slight importance.

CHAPTER III

FROM THE SATSUMA REBELLION TO THE SINO-JAPANESE WAR

The period from the Reformation to the Satsuma Rebellion may be called that of the origin or formation of the conscription system, which we have studied. Let us now proceed to the period from the Satsuma Rebellion to the Sino-Japanese War, which we may call the period of development.

The Satsuma War was an epoch-making event in the history of the Empire. Japan was now compelled to turn over a new leaf, by disengaging herself from her insular traditions. Changes were made in the conscription law in order to adapt it to the new circumstances. Changes were again made in the law in 1889, when the constitution was promulgated. Since then it has remained practically unchanged. This period witnessed more changes in the law than any other.

Changes in the Conscription Law

Amendments in 1879

Remarkable changes were made in the law by State Order No. 46, issued on October 27, 1879. The law so amended consisted of eight chapters, divided into sixty-eight clauses. The first chapter (clauses 1 to 8) treats of the organization of conscripts, the second (clauses 9 to 11) of the jurisdiction of conscripts, the third (clauses 12 to 26) of the nature of service, the fourth (clauses 27 to 36) of release from service and extension of time for enlistment, the fifth (clauses 37 to 43) of the examination for conscripts, the sixth (clauses 44 to 54) of the drawing of lots for enlistment, the seventh (clauses 55 to 67) of miscellaneous rules, and the eighth (clause 68) of enlistment.

1. The Duty of Service.—It is declared in clause 1 and clause 8 that service is obligatory upon all the males of the country, in which respect the new law remains the same as

the old. But in the new law are prescribed certain exceptions, in which some are rejected and some exempted, which we shall note presently.

2. Kinds of Service.—The military service is of four kinds —the regular army, the first and the second reserve, and the unorganized militia. Men who are twenty years of age must take the conscript examination. When they win in the drawing, they are to be enlisted in the regular service for three years (clause 2). As to the exceptions, we shall see later. The first reserves consist of those who have completed the regular service for three years.

Their term is also three years (clause 5). There are again exceptions to this. When the first reserves finish their term, they are to be enrolled in the second reserve service, which extends over four years (clause 6). The term of each service is prolonged in cases of war or other emergency (clause 7). Those who are seventeen to forty years of age and are not enlisted in any of the services are to be registered as unorganized militiamen (clause 8).

3. Specialization in Service.—According to ability and stature, men are assigned to one of the following branches of the army,—infantry, cavalry, artillery, engineering and commissariat (clause 1). If the required number of transport auxiliaries, nurses and mechanics are lacking, even those who are below the standard in stature, or are not fitted for managing arms, may be assigned to any of the said services. Or there may be cases in which those passing the conscript examination are required to fill vacancies according to their own trade (clause 3).

The regular service extends over the term of three years, to which there are exceptions. (1) Those singled out for the Imperial Guards must remain in the regular service for three years and six months (clause 2, par. 2). (2) The regular term of service for commissariat troops is six months (clause 3, par. 1). (3) The term for regulars transferred from the supplementary service shall be fixed, as the case may require (clause 52). Those of the regular service are assigned to the

garrison of the province whence they are called out (clause 2). In time of peace those who prove themselves proficient in military arts may be discharged even before the expiration of their term (clause 1, par. 1). Those who are strong in body, skilful in military arts and upright in conduct are singled out for the Imperial Guards (clause 1, par. 2). Regulars are paid fixed daily wages besides being provided with uniforms and boarding (clause 4).

Exceptions to the rule of two years for the first reserves are (1) two years and six months for the Imperial Guards (clause 2, par. 2); (2) five years and six months for commissariat soldiers (clause 3, par. 3). They may engage in their own trades in peace time. In cases of war or emergency, they shall immediately be called out, and enlisted in the regular army or in separate corps. They shall be ordered to enter barracks once a year, in order to review military arts (clause 5).

The second reserves are to stay at home and engage in business like the first reserves. In cases of emergency they shall be called out after the first reserves. In peace time, they must enter barracks once a year in the place where they passed the conscript examination (clause 6). The names of the unorganized militiamen are kept in the military register. In case of emergency, they shall be enlisted in defense corps, as occasion requires (clause 8).

Supplementary service is not yet recognized as a separate and independent service, but the regulations for the service are already in existence. Supplementary reserves are to fill by lot the vacancies in the regular army (clause 49). Those who are registered as supplementary reserves (amounting to one-half the regular army) are required to stay at home, until they are ordered to enter barracks and fill vacancies, according to lot, at the garrison to which they belong. It should be understood, however, that these reserves, although registered, shall be exempted from this service in peace time, if they do not receive the order to enter barracks at the end of one full year, beginning with April 20, which is the first

day for the regulars to enter barracks (clause 51). Those transferred from the supplementary to the regular service remain in the service for three years, beginning with the first day for the regulars to enter barracks, not with the day on which they actually entered barracks (clause 52).

4. Special Cases.—Invitation of volunteers is limited to certain branches of the army. Transport auxiliaries, nurses and mechanics are taken mainly from volunteers, until they reach full strength. Their term of service is the same as that of other services, except the transport auxiliaries.

5. Rejection and Exemption.—These two are included under the title "exemption." The former concerns those sentenced to one year or more of penal servitude or to one year or more of confinement as political offenders (clause 27, par. 2). The latter, or exemption proper, is applied to those who are deformed or inveterately diseased, and show signs of not being up to the medical standards prescribed in the regulations (clause 27, par. 1).

6. Postponement of and Exemption from Roll Call.—Postponement is provided under the title of *yuyo* (temporary postponement) and *yokunen-mawashi* (postponement to the following year). Postponement is of two kinds,—postponement in general and in peace time. The former goes by the name of *yokunen-mawashi* and the latter by the name of *yuyo*.

In either of the following circumstances men fall under the *yokunen-mawashi*, that is, their conscript examination is postponed to the following year:

(1) When sickness on the conscription day prevents them from taking the examination, when they are still in the mourning period of three weeks for the death of either parent, or when their parents are seriously ill, causing grave situations in the family, or when the medical officials do not require them to be present at some other examination place, nor go to their own home for examination (clause 41 and 42).

(2) When sickness, criminal offense, or other circumstances, which prevented them from entering the barracks on the fixed date, still obtain even on the first of October. These

must take the examination again the following year, and must enter barracks before other conscripts (clause 56).

Men in any of the following circumstances fall under the *yuyo* (postponement for one year in peace time):

(1) When they intend to serve in the navy.

(2) When brothers are to be called out at the same time. (In case of an even number, one-half; in that of an odd number, the least number, that is, one out of three.)

(3) One elder brother or one younger brother, or noncommissioned officers who serve in either the army or the navy.

(4) One elder brother or one younger brother of the military or navy officers. The case is excepted, if the one elder brother or the one younger brother, as in Nos. 2 and 4, are not up to the medical standard.

(5) When they have neither father nor elder brother, or when the father is dead, and when the elder brother has either disappeared or is unable to support the family without their assistance.

(6) Those who have finished at least one year's course either in the government schools under the direct control of the Educational Department or other offices, or in public normal schools.

(7) Those who have finished at least a three years' course either in public middle schools or in public technical schools.

(8) Those who live abroad for study or for business.

(9) Those who are yet below the standard in physique, or are not able to bear the burdens of service, owing to sickness.

(10) Criminal prisoners not convicted as yet (clause 35, pars. 1 to 10).

If the circumstances specified above are found still pending even the following year, then the postponement will be extended still another year (clause 34).

Exemption from service is called "exemption," or exemption from service other than that of militia (clauses 3 and 28).

This exemption is of two kinds, exemption of a general nature and exemption in peace time.

Under the former fall the following:

(1) The head of a family. However, those are excluded who set up a branch family, previous to reaching the conscription age, who assume the name of the wife setting up a new branch family, who revive an extinct family, or who are adopted by, and succeed, a man who retires before the age of fifty years.

(2) The only son (the heir) and the only grandson (the grandson of the same lineage). The existence of sisters not considered.

(3) The heir and the grandson (of the same lineage) of those above fifty years of age. But those are excluded who set up a branch family after reaching the conscription age, who are adopted by a man under fifty years of age, who revive an extinct family, who assume the name of the wife setting up a new branch family, and who are adopted as heirs or lineal grandsons, previous to reaching the conscription age, by the man assuming his wife's name.

(4) Those adopted as the heir or successor of those who are over fifty years of age and have no heir. But those are excluded who are adopted as the heir or successor of those setting up a new branch family after retirement.

(5) The heir or lineal grandson of those who are below fifty years of age but are inveterately diseased or deformed.

(6) Officials (above the *hannin* rank) and government religious teachers (including the probationers) and census registrars.

(7) Presidents and vice presidents and members of prefectural assemblies.

(8) Teachers employed in public schools and those in the schools under the direct control of the Educational Department and other offices.

(9) Semi-officials and employers of the government or of different prefectures whose substitute can not be obtained, and those who are attached to the foreign employers of the departments or prefecture and are being trained in certain arts at government expense. These cases are, however, to be decided by the state council (clause 31).

(10) Eligible conscripts who pay the exemption fee of two hundred and seventy *yen*, and those of the *yuyo* class who pay one hundred and thirty-five *yen* (clause 64).

The following are exempted from enrollment in peace time.

(1) The heir and lineal grandson of those below fifty years of age. And those are excluded who become heirs after reaching the conscription age, who set up a new branch family as the lineal grandson, who are adopted by those below fifty years of age, who revive extinct families, who assume the name of the wife sĕtting up a new branch family, and who become heirs or lineal grandsons of other families, previous to reaching conscription age.

(2) Those training in the military and naval schools and the naval armament office and regular mechanics belonging to the government dockyard.

(3) One elder brother and one younger brother of those who died while in the regular military or naval service, or of those who were wounded or contracted disease while in public office. The cases are treated in the same manner, when such circumstances arise among the first and second reserves.

(4) Those who are in possession of a license to practise medicine.

(5) Those completing the required course of the public middle schools or of the public technical schools.

(6) Those completing the required course of the public normal schools.

(7) Those completing the required course of the government schools under the direct control of the Educational Department or other offices.

(8) Those studying abroad, and possessing certificates for at least a two years' course.

(9) Those in possession of a license as captain, mate or engineer, according to the seamen's license regulations.

(10) Those in possession of a certificate for at least three years' service at sea as firemen or sailors, according to the seamen's employment regulations (clause 29, pars. 1 to 10).

(11) Those coming under either of the conditions specified under "general postponement," who are still in the same condition at the time of the conscript examination in the third year of the regular service (clause 34).

(12) Those coming under either of the conditions specified under postponement in peace time, who are still in the same condition at the time of conscript examination in the third year of regular service (clause 34).

(13) Those coming up to the medical standard, but drawing a blank lot (clause 49).

(14) Those assigned to the supplementary reserve service, but not ordered to enter barracks, at the end of one year, beginning with the first day on which regulars enter barracks (clause 51).

Of the above, those exempted from enlistment, according to either of the foregoing conditions, No. 13 or No. 14, are to be assigned to the first reserve service No. 1, while those exempted from enlistment, according to either of the conditions, No. 1 to No. 12, are to be assigned to the first reserve service No. 2. The latter will be called out, before they are thirty years of age, as second reserves, in cases of emergency. They may be called out and enlisted in army corps or in commissariat service, when the occasion requires it (clause 36).

7. Punishments.—In matters concerning conscription, those will be dealt with, according to the provisions of the common law, who give wrong information in regard to conscript age or the existence of parents or brothers, who inflict bodily injury upon themselves, who pretend or cause sickness, who evade conscription, or who issue false certificate of conscription (clause 66). All those who evade conscription in such manner, or neglect giving the required notices about it, will be examined at the time of enlistment the following year, and be ordered to enter barracks in preference to all others (clause 67).

The Conscription Law of 1883

The conscription law that had suffered changes by State Order No. 46, issued on October 27, 1879, was again amended

by State Order No. 46, issued on December 18, 1883. It consists of six chapters. The first chapter (clauses 1 to 7) is introductory, the second (clauses 8 to 15) relates to service, the third (clauses 16 to 23) to exemption and postponement, the fourth (clauses 24 to 29) to conscription districts and drawing of lots, the fifth (clauses 30 to 33) to supplementary reserves and to first and second reserves, and the sixth (clauses 34 to 44) to sundries.

I. The Duty of Service.—All the men of the country, seventeen to forty years of age, are eligible as soldiers (clause 1). In this respect, we find no change from the old law. As to the exceptions to this rule, we shall see presently.

II. Kinds of Service.—Service, whether army or naval, is that of the regulars, of the reserves and of the militia (clause 2). The regular service is divided into the active and the reserve. The active service is obligatory upon the men of twenty years of age and extends over three years. The reserve service is obligatory upon those who have completed the active service and extends over four years. The second reserve service is obligatory upon those who have completed the reserve service and extends over five years. Those who are seventeen to forty years of age, and are neither regulars nor reserves, constitute the militia (clauses 2 to 5). We shall later see the exemptions to the terms of the services. The term of each service may be extended in case of emergency, or when special manoeuvers or reviews take place, or when those of the respective services are either at sea or resident abroad (clause 6).

III. Specialization in Service.—Men of the military active service belong to one of the following lines, according to the number required each year, and to their bodily conditions and occupations: infantry, cavalry, artillery, engineering, mechanical and miscellanea (clause 8). Those of the naval active service belong to one of the following divisions, according to the number required and the result of examination into the conditions and occupations of those who live along the coast line, or in the islands: sailors, firemen and mechanics (clause 6).

The active service extends over three years. But the term may be shortened in the case of the miscellanea of the army, according to the nature of their duties. The term of the regular service, however, always remains the same (clause 9). Those of the active service may be discharged before the expiration of their term, if they prove proficient in their arts and conduct, or if they possess a certificate of military training received at government schools (clause 12). Men of the reserve service are to be called out in case of war or emergency, and enrolled in the regular army or in the supplementary corps. In peace time, the reserves are called out for review once a year, the term being sixty days. They are also called out once a year for roll call. Naval reserves, however, are not called out for review (clause 13). The second reserves are called out in case of emergency after the first reserves, in order to support the regulars. As to the calling out and roll call, the same procedure is followed for the second reserves and the reserves (clause 14).

The militia are called out and enrolled in corps, in case of emergency, when more men are needed, after the calling out of the second reserves (clause 15). The supplementary service is not yet recognized as an independent service, in the same sense that the regular or other service is an independent service. The supplementary reserves are taken from those who win the lot, and serve as such for one year. In case of vacancies in the active service, or in case of emergency when more men are needed, they are to be called out, according to lot. The number of the supplementary reserves should not be less than two-fifths of that of the regulars (clause 30). In addition to what have been described above, there are also emergency reserves. They are to be called out, in case of war or emergency, when more men are needed than are provided by the second reserves. They are enlisted in certain corps or commissariat service, according to the order of the lots (clauses 33 and 36). The manner of their enrollment will be described later.

IV. Volunteers.—There are two kinds of volunteers, those in general and those for one year's service.

(1) Volunteers in general. Those above seventeen years of age may volunteer for active service, even before the conscription age (clause 10).

(2) Volunteers for one year's service. Those in possession of diplomas received at government or prefectural schools, and ranging between seventeen and twenty-seven years of age, may be admitted into active service for one year at their own expense. Those who are already skilful in arts may be discharged from duties after some months. It should be understood, however, that they are not exempted from the prescriptive term of the regular service (clause 11).

V. Rejection and Exemption.—It is prescribed in the regulations that those convicted of grave offenses are not permitted to serve in the army or navy (clause 7). As to exemption from service, it is prescribed in clause 16 that the inveterately diseased or deformed are excused when they are not able to serve.

VI. Postponement of and Exemption from Enrollment.—The cases of postponement of enrollment provided in this law are divided, as was provided in the law of 1879, into those of a general nature and those of peace time. Let us first take up the postponement that takes place in peace time. Even those whose enrollment is postponed in peace time are, except those who fall under clause 18, par. 6, on page 30, to be enrolled when vacancies occur in the required number of supplementary reserves for a certain year, or when more men are needed to meet emergencies. The postponement of this class is further divided into that for an indefinite period, and that for a definite period.

(A) Postponement in peace time for an indefinite period (clause 17):

(1) One of the brothers who are called out at the same time, and one elder or younger brother of those who are already in active service.

(2) One elder or younger brother of those who died while in active service, or were wounded or contracted disease while in public service. This is granted only when they are exempted from service owing to these circumstances.

(3) The heir or lineal grandson of the head of a family about sixty years of age.

(4) The heir or lineal grandson of the head of a family, who is not able to support his family on account of deformity or chronic disease.

(5) The head of a family.

(B) Postponement in peace time for a definite period:

When those who have passed conscript examination are not able to enter barracks, owing to sickness or crime, and when such conditions remain on the first of September of that year, their enrollment will be postponed to the following year. In this case, they are required to take the examination again the following year before their enrollment. In case of war or emergency, the enrollment may take place, even before the conscription time in the following year (clause 40).

Now for postponements of a general nature. These are also divided into postponements for a definite period and those for an indefinite period.

(a) The postponement for an indefinite period:

Under each of the following circumstances, enrollment will be postponed as long as the circumstances remain unchanged (clause 18):

(1) Religious teachers.

(2) Teachers in government and public schools possessing diplomas conferred by government or public schools.

(3) Regular students belonging to government universities, or government schools on an equal footing with them.

(4) Military and naval cadets, and naval workmen.

(5) Those who are yet below the medical standard.

(6) Those who are unable to serve owing to sickness or debility after sickness.

(7) Those studying abroad.

(8) Unconvicted prisoners accused of penal crimes.

(9) Those whose civil rights are suspended.

When the experts employed in the departments and in prefectural and other offices are unable to secure their substitute for enrollment, they may be exempted from it, by decision of the state council (clause 21).

(b) The postponement for a definite period:

The enrollment of the students of different government and prefectural schools completing at least a one year's course may be postponed for six years (clause 19).

As to the exemption from enrollment, we have no prescribed rules, but can draw certain inferences from various regulations.

(A) The exemption is granted (1) in case those under either of the conditions of postponement in peace time for an indefinite period do not receive orders for enrollment, or (2) when they fall under one of the conditions of postponement of a general nature for an indefinite period. In either of these cases, they will be exempted from enrollment, if their condition remains unchanged for seven years, but will be registered as eligible reserves, until they are thirty-two years of age. In the former case, they will be enrolled in the active service, if they lose their qualification, during the course of six years after their registration as the supplementary second reserves (clause 32).

(B) The exemption is granted when those registered as supplementary reserves are not called out within the prescribed period, or when those regular students of the conscription age at the different government universities have finished at least a two years' course. These are to be registered as supplementary first reserves, until twenty-seven years of age. When their term as the said reserves expires, they will be registered as supplementary second reserves until thirty-two years of age (clause 32).

(C) Those drawing blank lots are exempted.

In connection with the above, it should be mentioned that those under the following circumstances never fall into the class granted postponement in peace time for an indefinite period (clause 22):

(1) The head of the dependent house (*fuseki koshi*), or the heir or lineal grandson of such person.

(2) Those ceasing to be the heir or lineal grandson, without such disabilities as chronic disease, deformity, inability

to make a livelihood, or accusation or conviction of grave offenses, or the heir or lineal grandson of such person.

(3) The heir or lineal grandson of him who succeeds, after reaching sixty years of age, or the head of a family who has ceased to be such before reaching sixty years of age, without such disabilities as are specified above.

(4) Those setting up a branch family or reviving an extinct family, or the heir or grandson of such men.

(5) Those heirs or lineal grandsons succeeding the heirs or lineal grandson whose disappearance is yet less than five years.

(6) Such heirs or lineal grandsons fall under the foregoing heads, Nos. 2, 3 and 4, and succeed him who has ceased to be the head of a family, without such disabilities as chronic disease, deformity, inability to make a livelihood, or grave offenses.

(7) Those succeeding him who has ceased to be the head of a family before reaching sixty years of age, without such disabilities as are given above (clause 21, par. 2).

(8) Those succeeding the head of a family who has died or ceased to be such and is not succeeded by his own heir or grandson, without such disabilities as are given above.

(9) Those succeeding the head of a family, whose disappearance is yet less than five years.

VII. Punishments.—Those who injure their own body in order to escape service, become sick on purpose, run away or conceal themselves, avoid attendance at the place of examination without sufficient reasons, or neglect sending the prescribed notices—these will be enrolled in the active service at once or after examination in the following year, without the privilege of drawing lots (clause 41).

Those who do not send the prescribed notices, or do not appear before the medical officers, in spite of an official notice of the date of examination, and without a sufficient reason, pay a fine of from three to thirty *yen* (clause 43). They will be imprisoned for a term ranging from one month to one year, in addition to which they have to pay as penalty three

to three hundred *yen* (clause 44), when they try to evade conscription in any way whatever.

From 1883 to 1889

Amendment of the conscription law was again made in 1889. It consists of seven chapters, divided into forty-six clauses. The first chapter (clauses 1 to 7) is introductory, the second (clauses 8 to 16) relates to service, the third (clauses 17 to 22) to exemption, postponement and *yuyo*, the fourth (clauses 23 to 24) to supplementary reserves, the fifth (clauses 25 to 29) to miscellaneous rules, the sixth (clauses 30 to 31) to punishments, and the seventh (clauses 32 to 46) to supplementary rules. This new law shows a great advancement over the old, in that it abolishes most of the privileges given to various social ranks. It forms the foundation of the law that is in force at present. The following is an outline of this new law:

1. The Duty of Service.—Same as the old law we have studied above.

2. Kinds of Service.—According to the old law, the term of active service was three years and that of reserve service four years, both in the army and navy. This was changed in the new law to three years for active service in the army and four years for active service in the navy, and to four years for reserve service in the army and three years for reserve service in the navy (clause 3).

3. Specialization in Service.—As to the different branches of the army, we find no changes in the new law, except the clause in which men on the different islands are required to serve in their respective local branches of the defense army (clause 8). Concerning the term of active service for the miscellanea, both in the army and navy, we find that it may be shortened, as the case may be, though there is no shortening of the prescriptive term of the regular (standing) service (clause 9). For example, transport auxiliaries are in active service only one year (see Imperial Order No. 37, issued in March, 1890); those of the defense army live in barracks only

one year (clause 9); those who are proficient both in arts and conduct may be permitted to return home previous to the expiration of their terms (clause 13).

The reserves and second reserves, both in the army and navy, must be present at the annual reservist inspection (clauses 14 and 15). There is no change in the regulations concerning the national army (clause 16). Those experts in government or local offices, for whom no substitutes are obtainable, are not required to be present at the said inspection. Members of different assemblies instituted by law are also excused during session (clause 22).

The supplementary service is not yet treated as an independent service, but its regulations are found under the head of reserve enrollment. When the number of men enrolled in active service, according to the order of lots, exceeds the yearly requirement, the surplus men are put on the supplementary reserve for one year, reckoning from the first of December.

Those of the supplementary reserve not called out within their term are transferred to the militia rolls (clauses 23 and 24).

4. Special Cases.—(1) No change concerning volunteers (clause 10).

(2) One year volunteers. Those are eligible for this class of volunteers who are in possession of diplomas given at the different government schools, prefectural normal and middle schools or private schools, in which law, politics and economy are taught according to the rules approved by the Educational Minister. Those who pass the examination given by a military examination committee are also eligible. In all of these cases, the expenses are to be paid by the volunteer. But the government may give a partial support to those whose inability to pay all the expenses is confirmed (clause 11).

Volunteers of this class are permitted to choose their branches of service and places of duty, when they do not receive any support from the government. They pay sixty *yen* a year for the expenses of clothing, arms, ammunition,

etc. Those volunteering for cavalry pay eighty *yen* for the expenses of harness, etc., in addition to the sixty *yen*.

The government does not pay them salary. They live outside barracks at their own expense. If they are unable to pay these expenses, part of them will be defrayed by the government (see Imperial Order No. 14, clauses 1 to 6, issued in February, 1887). They receive special training, and are enrolled for two years' reserve service when their term for active service expires, and for five years' second reserve service when the reserve service term expires (clause 11).

(3) Six weeks' active service. Those possessing a diploma given at government or prefectural normal schools and teaching in government or public primary schools may be enrolled for six weeks' active service. Their age is seventeen to twenty-six years. Their expenses are paid by the government.

At the expiration of their term, they will be registered as militiamen. In case they resign their post as teacher in the course of the six weeks, and before reaching the age of twenty-six years, they will be transferred to the active service, without a drawing (clause 11).

V. Rejection and Exemption.—Those convicted of grave offenses are not permitted to serve in the army (clause 7). Those sentenced to imprisonment or punished for gambling may not become one year volunteers (clause 12). Those are exempted from service who are inveterately diseased or deformed and do not come up to the medical standard (clause 17).

VI. Postponement of and Exemption from Enrollment.—Those coming under any of the following conditions are granted a postponement of enrollment:

(1) When they are yet too short of stature, though of strong physique.

(2) When they are sick or convalescent.

In either of these two cases, the enrollment is postponed for one year (clause 18).

(3) When they are in detention, on account of light or heavy offenses that may cause suspension of civil rights (clause 19).

(4) When their families are dependent on them for support and when they send in requests for postponement with proper confirmation of the fact. If the conditions remain unchanged for more than three years, they will be registered as militiamen. But their requests for postponement will not be granted in case they set up a new branch family, or revive an extinct family, or fabricate such conditions as will leave their families helpless (clause 20).

(5) Those who are not able to enter barracks on account of sickness or crime (clause 27).

Each of the foregoing cases of postponement are included under the general term, *yoyo*, but they are treated differently.

(6) When they come under (2) of the special cases mentioned above, enrollment may be postponed at their own request, until they are twenty-six years old. They will be enlisted without drawing, in either of these two cases: when such conditions change before they are twenty-six years old, or when such conditions are pending, even after they are twenty-six years of age (clause 21, par. 1).

(7) For those studying abroad, enrollment will be postponed, at their own request, until they are twenty-six years of age. If they return home before or after that age, they will be listed, without drawing (clause 21, par. 2).

In either of the following cases, exemption is granted:

(1) When they are still below the standard in stature, though of strong physique, or when they are still sick or convalescent the following year at the time of enrollment (clause 18).

(2) When their families are still in need of them, even three years after postponement.

Statistics of Conscription

Increase in the Number of Army Corps

The organization of army corps in 1875 was altered in 1870. According to the regulations (chapter 8) issued in the latter year, the number of the standing army corps, distributed among the six garrisons, was as follows:

Infantry, 14 regiments
Cavalry, 2 battalions
Artillery, 9 battalions
Commissariat, 6 sections
Coast Artillery, 9 corps
Full force in peace times, 31,440
Engineers, 3 battalions and 3 companies

In 1882, an Imperial proclamation was issued for the expansion of armaments, and the schemes for the national defense were completely revised. Two years later the infantry regiments of the garrisons were organized into brigades, other branches of the army being also enlarged. This renovation prepared the way for the organization of the divisions. According to a table contained in the departmental ordinance No. 53–B, issued by the Military Department on May 24, 1884, the number of army corps was as follows:

ACTIVE

Infantry, 12 brigades (24 regiments)
Cavalry, 6 regiments
Artillery, 6 regiments
Engineers, 6 battalions
Commissariat, 6 battalions
Fortress artillery, not organized

RESERVE

Infantry, 24 battalions
Cavalry, 6 companies
Engineers, 6 companies
Commissariat, 6 companies
Artillery, 6 companies

The actual number of army corps, including the Imperial Guards, in that year, was—

Infantry, 24 regiments
Cavalry, 2 battalions
Artillery, 6 regiments and 1 battalion
Engineers, 3 battalions and 4 companies
Commissariat, 6 sections
Gendarmes, 2 battalions
Colonial troops, 1 battalion and 2 sections
Telegraph corps, 2 corps[1]

In 1886, when the naval stations were established, the military authorities saw the necessity of distributing fortress artillery for the defense ot harbors and islands. The following table, including the Imperial Guards, applies to that year:

Infantry, 4 brigades
Cavalry, 2 battalions
Artillery, 7 regiments
Engineers, 3 battalions and 4 companies
Commissariat, 6 battalions
Gendarmes, 3 battalions
Colonial troops, 2 battalions
Telegraph corps, 2 corps
Musicians, 1 corps
Defense guards, 1 corps

[1]This table is based on MOTOJIRO TANABE, *History of the Japanese Army.*

Total Enrollment and Exemptions

Year	Army			Navy			Sum Total	Postponed and Yuyo	Exempted from Enrollment	Exempted from Service	Not Yet Mustered Out	Grave Offense	Grand Total
	Active	Sup.	Total	Active	Sup.	Total							
1885	27,389	152,613	180,002	295	125	420	180,422	144,363	....	62,373	....	291	387,389
1886	17,963	174,704	192,667	300	124	424(18)[a]	193,109	147,466	....	60,380	....	323	421,278
1887	33,814	166,591	200,405	450	198	648(12)[a]	201,065	271,560	....	304,855(6)[b]	...	492	777,972
1888	19,867	86,744	106,611	250	109	359(9)[a]	106,979	138,075	....	182,545(2)[b]	....	247	427,840
1889	18,477	74,372	92,849	305	189	494	93,343	53,766	794	211,256	1,062	136	360,357
1890	19,119	126,966	146,085	1,246	599	1,845	147,930	39,710	76,737	84,959	900	133	350,309
1891	20,254	125,149	145,403	435	488	923	146,326	42,230	86,602	84,830	1,291	142	361,422
1892	19,962	143,691	163,653	50	85	135	163,788	48,176	150,471	28,973	1,146	209	392,763
1983	20,166	100,249	120,415	459	426	885	121,130	50,858	228,916	29,864	1,223	179	432,340
1894	21,407	97,679	116,086	947	668	1,616	120,701	55,284	227,913	30,709	1,452	187	436,246

[a] Supplementary first reserves.

[b] Not taking examination.

The fluctuation of the number in the following years is shown below:

1887 Colonial troops, 3 battalions and 1 company; telegraph corps, abolished.
1888 Engineers, 6 battalions and 1 company; musicians, 2 corps.
1889 Gendarmes, 4 corps; Colonial troops, 5 battalions.
1890 Cavalry, 6 battalions; Gendarmes, 6 corps; fortress artillery, 2 battalions (4 regiments under consideration).
1891 Fortress Artillery, 2 regiments (4 regiments under consideration); Colonial troops, 4 infantry battalions and 1 cavalry, 1 artillery and 1 engineering corps.
1892 Imperial Guards, 1 engineering company enlarged into 1 engineering battalion.
1893 No change.
1894 Fortress artillery, 3 regiments; Gendarmes, 1 corps added.

NUMBER OF CONSCRIPTS[1]

Year	(Meiji Era)	Active Service		Supplementary Reserves	Total
1878	11	10,158		3,888	15,046
1879	12	10,299		3,888	14,187
1880	13	25,374	15,000 of which were commissariat	24,293	49,667
1881	14	24,767	"	8,754	33,521
1882	15	24,817	"	8,746	33,563
1883	16	26,208	"	9,952	36,160
1884	17	26,288	"		

Proportion of Conscripts to Population and to Males of Conscript Age

TABLE I.—CONSCRIPTS FOR ACTIVE SERVICE PER 1,000 POPULATION

Year	Population	Conscripts for Active Service	Per 1,000 Population
1878	34,898,540	10,158	.291
1879	35,768,584	10,299	.287
1880	35,929,060	11,124[a]	.309
1881	36,358,994	10,214[a]	.269
1882	36,700,118	10,567[a]	.288
1883	37,017,302	11,958[a]	.323
1884	37,451,764	12,038[a]	.344
1885	37,868,984	13,423[a]	.354
1886	38,507,177	18,261	.466

[a] In these years, $\frac{19}{20}$ of 15,000 commissariats were deducted from the figures given in preceding table, because only one twentieth of them were enrolled, according to the regulations.

[1] Based on the table of annual conscripts in *The Compendium of Laws and Ordinances.*

TABLE I.—*Continued*

Year	Population	Conscripts for Active Service	Per 1,000 Population
1887	39,000,001	20,008	.512
1888	39,007,234	20,115	.507
1889	40,072,020	18,782	.468
1890	40,453,401	20,305	.534
1891	40,718,077	20,089	.501
1892	41,089,040	20,012	.487
1893	41,388,313	20,025	.498
1894	41,813,215	22,354	.535

TABLE II.—CONSCRIPTS PER 1,000 POPULATION

Year	Conscripts per 1,000	Year	Conscripts per 1,000
1878	.402	1887	5.095
1879	.397	1888	2.701
1880	1.382	1889	2.320
1881	.922	1890	3.057
1882	.915	1891	3.593
1883	1.000	1892	3.287
1884		1893	2.934
1885	4.704	1894	2.887
1886	5.035		

TABLE III.—CONSCRIPTS FOR ACTIVE SERVICE PER 100 MALES OF MILITARY AGE

Year	Males of Military Age	Conscripts Per Cent	Conscripts Examined	Conscripts for Active Service per 100 Conscripts Examined
1880	273,307	4.325	....	
1881	300,724	3.330		
1882	280,813	3.703		
1883	308,723	3.874		
1884	307,748	3.402		
1885	337,350	3.905	....	
1886	421,278	4.339		
1887	301,360 (first examination) 380,000 (second examination)		....	....
1888	427,846	4.700	....	
1889	360,357	5.211		
1890	301,422	5.035	....	....
1891	330,389	5.905	....	....
1892	302,793	5.044	....	
1893	432,340	4.704	352,236	5.550
1894	430,240	5.194	379,700	5.887

TABLE IV.—CONSCRIPTS PER 100 MEN OF MILITARY AGE

Year	Conscripts per 100 Males of Military Age	Conscripts per 100 Men Examined	Year	Conscripts per 100 Males of Military Age	Conscripts per 100 Men Examined
1880.....	18.173	....	1888.....	25.056	....
1881.....	10.932	....	1889.....	25.903	....
1882.....	11.953	....	1890.....	46.097	....
1883.....	11.756	....	1891.....	41.763	....
1884.....	.....	....	1892.....	41.702	....
1885.....	46.566	....	1893.....	28.079	37.280
1886.....	45.837	....	1894.....	27.668	31.789
1887.....	.....	....			

REASONS FOR THE CHANGES

This was the period of the completion of the conscription law, whose contents underwent great and rapid changes. These remarkable changes were due to the idea of raising the army from the whole nation, without any distinction of class; and this idea was in turn due to the rapid changes in the political and social conditions of the people.

This idea had already existed even at the time of the promulgation of the law. In the Imperial mandate, issued in 1872, we find these words: "According to our ancient system, the whole people were eligible for military service. In case of emergency, the Emperor raised expeditionary forces among the able bodied males and took command of them." The nation had, however, not felt the full force of this idea until the Satsuma Rebellion. The burden of conscription had as yet been very light, in respect of the number, term, postponement and exemption. It was only in this period that the idea was put into practice to the fullest extent.

The circumstances at the time of the Restoration deterred the nation from making any preparations for the emergencies on the continent that may affect the independence of the country. Nor was the new government yet strongly established in power. There was a great deal of dissatisfaction among the military people, who were deprived of their traditional privileges, social and political.

The remnant of the Shogunate party was still "loitering with intent." Consolidation of the state and military prepa-

rations were of urgent necessity, and to this the whole energy of the government authorities was devoted. The use of the standing army for local guard was the result of their great effort. Both the conscription law, issued in 1873, and the law revised in 1875, contain the following words: "Men of the different branches of the army are to be raised in the district under the jurisdiction of each garrison. They shall serve in the army for a certain period of time at their respective garrisons. They are for local defense." The ordinary way of distributing men over the districts other than their own, especially when a civil war was feared, was not resorted to by the new government. Their system was based upon the principle of assigning men to the place from which they came. The whole country was divided into six military jurisdictions; and each garrison was to defend the district under its own jurisdiction with men raised from that district. The Imperial Guards were an exception to this rule. This circumstance was due to the influence of the old apportionment of men adopted by the feudal lords under the Shogunate Government, who held their own in different localities. As the result of this circumstance, men raised by the different garrisons had already been of different fiefs. Hence there was no need of redistribution of men by the military authorities.

The government had always felt uneasy until the suppression of the insurrection at Saga (1874) and of the Satsuma Rebellion (1877), after which they saw no cause for apprehension. Their attention was now turned to the great problem of national expansion.

Two years after the Satsuma Rebellion, the conscription law was revised, by which the term of service was extended. The conditions ior postponement and exemption were made somewhat more rigorous. But this was not sufficient. In accordance with the Imperial rescript given to the army and the navy in 1882 and the Imperial edict issued in the same year relating to the expansion of the military and naval systems, the authorities started that reorganization. In 1883, another revision of the law was effected in order to pre-

pare for emergencies abroad. The term of service was again extended, the system of substitution was abolished, and the conditions for exemption and postponement were made still more severe. Besides, the provision for one-year volunteers was established, by which the way was opened for filling vacancies in the list of reserve officers. It was in 1889 that another revision was made. The conditions for postponement and exemption were made extremely rigorous. All the regulations that were intended for the protection of the family system were done away with. The whole nation was now eligible for service.

CHAPTER IV

FROM THE SINO-JAPANESE WAR TO THE RUSSO-JAPANESE WAR

Since its enactment in 1889, the conscription law has undergone little change, except a slight amendment made by State Order No. 15, issued in March, 1895, and it remained the same until the time of the Russo-Japanese War. This was perhaps because the revision of 1889 was so complete as to make any further change needless.

Changes in the Conscription Law

We need not go over the whole of the law revised in 1895. Let us look over only those points that were changed.

(1) The term for reserve service in the army was changed from four years to four years and four months (clause 3).

(2) The old system of filling up vacancies in the active and reserve services was changed into the supplementary reserve service (*Hoju-eki*), the first supplementary reserve service and the second supplementary reserve service. The term for the former extends over seven years and four months.

These reservists are taken from among the surplus men for active service. The term for the latter extends over one year and four months, the required number of men being taken from among the surplus men for the former. In the case of the navy, the required number of men is taken among the surplus men for active service (clause 5).

(3) The militia service is divided into the first militia service and the second militia service. Those who have completed the term for the first supplementary reserve service are enlisted in the former service. In the latter service is enlisted those who have completed the active, the reserve and the supplementary service and the first militia service (clause 6).

(4) The period of temporary exemption (*yuyo*) for stu-

dents of the schools prescribed is now extended to twenty-eight years of age (formerly twenty-six years) (clause 23).

(5) Those studying abroad were temporarily exempted from enrollment until twenty-six years of age. In regard to this, we notice the following changes: Those staying abroad (excepting those in Korea) may be postponed at their own request. But they will be enrolled, if they return home before reaching thirty-two years of age. When they are above thirty-two years of age, they will be enlisted in the militia service. But they may apply for one-year volunteer service (clause 23).

Statistics of Conscription

Increase in the Number of Army Corps

At the conclusion of the Sino-Japanese War, an increase of armaments was effected (1896). The colonial troops were organized into a division, and five new divisions were created. These six new divisions added to the existing six divisions, together with the Imperial Guards, now numbered thirteen in all. Besides, there were now three composite brigades in Formosa. The number of army corps was accordingly increased as follows:

1896 The cavalry battalion attached to the Imperial Guards was increased to one regiment. The number of the infantry regiments increased to forty-eight, that of the cavalry regiments to sixteen, that of field artillery regiments to eighteen, that of engineers and commissariats to twelve battalions, and that of fortress artillery corps to four regiments and four battalions. The seventh division consisted of one independent infantry battalion, one independent field artillery battalion, and one independent engineering company, besides which this division included four battalions of colonial infantry, one cavalry, one artillery and one engineering corps. The composite brigades in Formosa consisted of six infantry regiments, three

NUMBER OF CONSCRIPTS

Year	Army			Navy			Sum Total	Post-poned Yuyo	Exempted from Enrollment	Surplus	Exempted	Not Yet Mustered Out	Grave Offense	Grand Total of Men of Conscript Age
	Active	Sup.	Total	Active	Sup.	Total								
1895	21,662	57,454	79,116	780	312	1,092	80,208	62,629	269,177		35,952	1,715	153	449,834
1896	42,886	130,453	173,339	1,227	481	1,708	175,047	68,392	212,197		31,472	2,618	169	489,895
1897	45,791	92,158	137,949	2,473	988	3,461	141,410	72,279	210,360	19,225	31,070	3,045	166	477,555
1898	52,040	124,096	176,136	1,412	564	1,976	178,112	79,518	198,248	11,101	32,578	3,215	152	502,924
	Enrolled		Enrollment Postponed			Exempted from Enrollment			Exempted from Service			Total Men Examined		
1899	182,896		2,798			202,317			32,189			420,200		
1900	186,936		3,451			189,962			32,247			412,796		
1901	191,628		2,997			200,668			33,485			422,778		
1902	197,417		3,921			196,396			33,289			431,031		
1903	183,822		3,692			129,127			27,849			344,490		
1904	269,284		3,630			104,582			30,450			407,946		

cavalry companies, three field artillery companies, two fortress artillery battalions, three engineering companies and one railway guard corps.

1897 The independent engineering company of the seventh division was enlarged into one battalion. One independent fortress artillery battalion was added.

1898 The number of divisions was increased to twelve.

1899 Four new regiments were added to the existing colonial infantry of the seventh division.

1900 One cavalry regiment, one field artillery regiment, one engineering battalion and one commissariat battalion were added to the seventh division. The army stationed in China consisted of four infantry battalions and one field artillery company.

1903 The army stationed in China now consisted of one infantry corps. One infantry corps was stationed in Korea. The colonial infantry of the seventh division was reduced to one corps. The schemes for the expansion of armaments made out in 1896 was at last completed, when the number of the different corps, increased in 1899, was filled up.

Proportion of Conscripts to Population and to Males of Conscript Age

TABLE I.—NUMBER ENROLLED IN ACTIVE SERVICE PER 1,000 POPULATION

Year	Population	Enrolled in Active Service	Per 1,000 Population
1895	42,270,620	22,442	.503
1896	42,708,264	44,113	1.032
1897	43,228,863	48,264	1.116
1898[a]	43,763,855	53,452	1.221

[a] There is no official table of those enrolled in active service after 1898.

TABLE II.—NUMBER ENROLLED PER 1,000 POPULATION

Year	Population	Per 1,000 Population
1895	See above	1.898
1896	" "	4.099
1897	" "	3.273
1898	" "	4.070
1899	44,260,642	4.132
1900	44,815,980	4.171

TABLE II.—*Continued*

Year	Population	Per 1,000 Population
1901	45,437,032	4.217
1902	46,022,476	4.289
1903	46,732,841	3.933
1904	47,219,566	5.703

TABLE III.—NUMBER ENROLLED IN ACTIVE SERVICE PER 100 MEN OF CONSCRIPT AGE

Year	Men of Conscript Age	Per Cent in Active Service	Men Examined	Ratio of Men Enrolled in Active Service per 100 Examined
1895	449,834	4.987	386,613	5.804
1896	489,895	9.002	423,178	10.426
1897	477,555	10.108	401,952	12.006
1898	502,924	10.626	421,654	12.677

TABLE IV.—NUMBER ENROLLED PER 100 MEN OF CONSCRIPT AGE

Year	Enrolled per 100 Men of Conscript Age	Enrolled per 100 Examined
1895	17.831	20.747
1896	35.731	41.244
1897	29.821	35.185
1898	35.417	42.265
1899	....	43.526
1900	....	44.376
1901	....	44.691
1902	....	45.794
1903	....	53.349
1904	....	66.000

REASONS FOR THE CHANGES

According to Count Okuma's "History of the Fifty Years Since the Opening of the Country," the field of battles during the Sino-Japanese War was so wide that there was a great lack of men.[1] This was the reason why the period of the entire service was extended to twelve years and four months, and why the system for filling up vacancies in active and reserve service was reorganized into what is called the supplementary reserve service (*hoju-eki*), whose term ranges from one year and four months to seven years and four months. These changes were made in March, 1895. The increases in the number of divisions and in the men to be enrolled in active service that followed the above changes were also due to the same reason.

[1] See section in which Prince Yamagata deals with our military system.

CHAPTER V

FROM THE RUSSO-JAPANESE WAR TO THE PRESENT TIME

Since the Russo-Japanese War, the law has twice undergone changes. The first revision by Imperial Ordinance No. 212, issued in September, 1904, relates to the following points: (1) the extension of the five years' term of the military second reserve service to ten years, (2) the extension of the seven years and four months' term of the supplementary first reserve service and of the one year and four months' term of the supplementary second reserve service to twelve years and four months, (3) the establishment of a detailed system of militia service in both the army and the navy, and (4) the extension of the term of the second reserve service for one year volunteers. It was by the revision in 1906 that all these changes made by this ordinance were drafted into law. We shall next study the essential points of the conscription law, issued in 1906. All through this period the most important change was the Imperial Ordinance concerning the two years' service.

Changes in the Conscription Law

The essential points of the law as revised in 1906 are as follows:

I. The Duty of Service.—The same as in the former law.

II. Kinds of Service.—Service is of four kinds, the regular, the reserve, the supplementary and the militia (clause 2). The regular service is divided into the active and the active reserve. As to the three years' term in the army, and the four years' term in the navy of active service, and the four years and four months' term in the army and the three years' term in the navy of active reserve service, we find that they are the same as those prescribed in the law of 1889. The reserve service in the army extends over ten years and in the

navy five years (clauses 3 and 4). The supplementary service in the army extends over twelve years and four months, and that in the navy, one year. In the latter case, the required number for the service is taken from the number that exceeds the required quota for active service (clause 5). The militia service is divided into first militia and second militia. The list of the former service in the army is filled by those completing the reserve service, or those supplementary reserves called out and completing their service. In the navy, the list is filled by those completing the reserve service. The list of the second militia service is filled by those who are not in the regular, the reserve, the supplementary or the first militia service (clause 6).

III. Specialization in Service.—No change in active, active reserve and reserve services (clause 16).

Supplementary reserves both of the army and the navy are to fill vacancies in the list of active service, and are to be called out in case of war or emergency. But this filling up of vacancies is limited to the first year of active service. In the case of the army, the reserves are called out for training, which will last one hundred and fifty days, in peace time. They will be called out for review and inspection, in the same way as the active reserves (clause 17).

IV. Special Cases.—(1) Volunteers. No change.

(2) One year volunteers. Those are eligible as one year volunteers who are seventeen to twenty-eight years of age, and desire to be officers of the active reserves or the supplementary reserves. They must be graduates of those schools that are prescribed in the old law, or must pass the required examination. While in service, they must pay all the necessary expenses, although the government may defray part of their expenses, as the case may require (clause 13). They are as a rule to serve in the garrison that is quartered in their locality, but may be transferred to other places, in case of necessity. The branch of service they enter will be determined by their wish and by the convenience of the authorities. Those completing certain courses of study may apply

for the service, as accountants, surgeons, veterinary surgeons or pharmacists.

Their expenses must be paid in advance, according to regulations issued by the War Minister (clauses 1, 2, 3 and 7 of the Regulations for One Year Volunteers in the Army).

Those completing one year's service as volunteers will be enrolled in the active reserve for six years and four months and at the completion of this, in the reserve service for ten years (clauses 10 and 13 of the regulations above).

(3) Six weeks' active service. Those who are seventeen to twenty-eight years of age, and have such qualifications as prescribed by the old law, may be enrolled in this service. In case their names are dropped out of the teacher's list before they are twenty-eight years old after the active service, they will be enrolled in the active service for two years without a drawing, and in the active service and the supplementary service, successively (clause 13), when the term for the active service is completed.

V. Rejection and Exemption.—Those convicted of felony are not admitted into any branch of the service (clause 8). Those sentenced to imprisonment or punished for gambling, are not eligible for the one year volunteer service (clause 14). The rules concerning exemption from service are the same as those of the old law.

VI. Postponement of and Exemption from Enrollment.—Postponement of enrollment takes place in any of the following circumstances:

(1) Same as that prescribed in the old law.

(2) Same as that in the old law. (Clause 20 of the new law corresponds to the items above.)

(3) Same as that prescribed in the old law. (See clause 21 of the new.)

(4) Same as that of the old law. (See clause 22 of the new.)

(5) Same as that of the old law. (See clause 27 of the new.)

(6) Residents of the different schools stated under the item of one year volunteers may have their enrollment post-

poned until they are twenty-eight years of age. But such postponement is granted only when they apply for it. When their conditions are changed, before twenty-eight years of age, or when their conditions still remain unchanged at that age, they will be enrolled, without drawing lots (clause 23).

(7) Those staying abroad. Their enrollment is postponed only at their own request. They will be enrolled without a drawing if they return home before they are thirty-two years of age (clause 23). Residents in Formosa, Saghalien, the Loochoos, Korea, the Kuriles, Hongkong and Amoy, are not granted postponement, but may take their examination at the neighboring garrisons or consulates, in accordance with the orders that will be issued by the War Minister (Imperial Order No. 318, issued in December, 1904).

The case of postponement that takes place under the last two conditions is called *yuyo* (temporary exemption from enrollment), in order to distinguish it from the other cases.

Exemption from enrollment takes place under the following conditions:

(1) The first of the items stated in the old law concerning exemption (clause 20 of the new law).

(2) The second of the items stated in the old law concerning exemption (clause 22 of the new law).

(3) When those residing abroad (except in those countries specified above) and obtaining the permission for postponement at their own request are more than thirty-two years of age (clause 23).

(4) When the number of those winning the lots as supplementary reserves exceeds that of the actual vacancies to be filled (clause 11).

VII. Punishments.—The same as those prescribed in the old law.

The foregoing are the essentials of the new law issued in 1906. The rules concerning the two years' service also demand our special attention. In Imperial Ordinance No. 332, issued in October of the same year, are found the follow-

ing statements, concerning the release of infantry soldiers in the active service:

Those infantry soldiers in the active service who prove proficient in their line may be discharged from their duties at the end of two years' service. It should, however, be understood that a certain number of them as deemed necessary, will be detained in case of war or emergency (clause 1, ordinance No. 332).

This rule is also applicable to men belonging to other branches of the army (clause 2).

This ordinance is binding upon all those to be enrolled after 1905.

Part of those to be enrolled that year will, however, be released (supplementary rules).

The departmental order, issued in February, 1908, states that after 1905, men of the military medical corps may be released at the end of two years' service.

There have been no changes since. But we understand that additional changes are in contemplation, among which are the following:

(1) All those who attain the age of twenty should go through the conscript examination, without exception.

(2) Residents of different schools wishing postponement of enrollment may obtain permission until they are twenty-six years of age. The Investigation Committee on Education contemplates changes of almost the same import.

Statistics of Conscription

Increase in the Number of Army Corps

After the Russo-Japanese War, the number of divisions was increased from thirteen to nineteen. Military Order No. 4, issued in September, 1907, and amended in April, 1908, by Order No. 12, contains a table concerning the distribution of the standing military corps. Our present system is based on this table, according to which the number of military corps is as follows:

19 Divisions:

Infantry, 26 brigades (76 regiments)
Cavalry, 4 brigades (27 regiments)
Field artillery, 25 regiments (8 of which are formed into three brigades)

Mountain artillery, 3 battalions
Engineers, 19 battalions
Commissariat, 19 battalions
Heavy Artillery, 6 regiments and 6 battalions (4 of which are formed into 2 brigades)
Communication corps (railway regiments, telegraph and aeroplane corps), 1 brigade
Defense guards, 1 battalion
Musicians, 2 corps

The standing army corps stationed in Formosa, Saghalien, Manchuria and Korea are not included in the above table.

The division increase bill having passed through the Imperial diet at its special session in May, 1915, there will be an increase of two divisions, to be stationed in Korea. The full strength of the army corps belonging to these new divisions will then be as follows:

Infantry divisions, 2
Cavalry regiments, 2
Heavy artillery battalions, 2
Engineering battalions, 2
Field artillery regiments, 2

The plan is to complete the organization in six years, beginning with the filling up of one third of the infantry force (that is, of sixteen companies), in one division, and in the other division, with the filling up of one-twelfth of the infantry force (that is, of four companies), and with that of two cavalry companies, two artillery companies and two engineering companies.

NUMBER OF CONSCRIPTS

Year	Enrolled	Postponed	Exempted from Enrollment	Exempted from Service	Total Examined
1905[a]	....	....	....	....	....
1906	201,714	3,428	158,220	33,388	396,750
1907	245,257	3,300	136,007	28,279	412,843
1908	252,103	4,685	150,343	32,036	439,167
1909	257,293	7,652	156,631	31,565	453,141
1910	257,507	6,950	140,230	27,741	432,428
1911	258,201	7,464	114,731	19,877	400,273
1912	258,893	6,993	157,640	17,466	440,992

[a] The number for 1905 was not officially announced.

Proportion of Conscripts to Population and to Males of Conscript Age

TABLE I.—NUMBER OF CONSCRIPTS PER 1,000 POPULATION

Year	Population	Conscripts per 1,000 Population
1905	47,678,396	6,520
1906	48,164,761	4,188
1907	48,819,630	5,023
1908	49,588,804	5,084
1909	50,254,471	5,120

TABLE II.—CONSCRIPTS PER 100 MALES OF MILITARY AGE

Year	Conscripts per 100 Examined	Year	Conscripts per 100 Examined
1905	78.107	1909	56.759
1906	50.707	1910	59.468
1907	59.169	1911	61.010
1908	57.426	1912	57.378

REASONS FOR THE CHANGES

The military authorities learned in the Russo-Japanese War that the old conscription law was insufficient to fill the needs in war time and as a result the amendment of the law was, as we have already seen, effected by the Emergency Ordinance, issued by the Emperor in September, 1904. This amendment had as its primary aim the immediate increase of men by the extension of the term of service. The authorities saw, however, that the necessity of increasing the number of men would continue to exist in the future, and the present conscription law was enacted in 1906. The number of men in active service was, of course, increased during this period. The exact number is not officially announced, but it is believed that 22 or 23 per cent of the conscripts examined are now enrolled in active service. Such an increase of men in active service is plain, when we see that the divisions that had been thirteen in all were increased to nineteen after the conclusion of the Russo-Japanese War. As to the two years' service, there is no doubt that it owes its existence partly to the post-bellum movement. But we must not forget that the establishment of this service had already been recognized as necessary for the curtailment of national expenses,

even before the Russo-Japanese War. We can understand how necessary was the curtailment, when we see the rapid increase in the number of men in active service. Sixty thousand men in the said service were increased to one hundred and fifty thousand, after the Sino-Japanese War; and the full war time force of two hundred thousand was increased to five hundred thousand. The state paid about one hundred million *yen* for the expansion, besides the annual expenditure of thirty-eight million *yen*, which had been twelve million *yen* formerly. The armament thus expanded could not be reduced, while the heavy burden had to be reduced. This was the reason that the influence of the advocates of the two years' service began to tell upon the people after 1902. The Imperial Ordinance issued in 1907 is to be regarded as a partial solution of this great problem.

CHAPTER VI

CONCLUSION

We have thus far studied the historical development of our conscription law, its changes and reasons. Let us now sum up our results. It is a fact worthy of note that the Satsuma Rebellion was a turning point in the history of the law. Previous to that event, the law had aimed at the maintenance of peace and order at home, but since that time it has always been the object of the law to prepare for emergencies on the continent. This policy of preparedness has ever since been supported by the increase of population at home. So far as the general trend of the world is for military competition, this policy of ours must be pursued. Completion of armaments must be aimed at. Our conscription law had undergone various changes, in order to meet such circumstances, making the burden of military service heavier and heavier. The principle that the whole people are eligible for service is being realized almost to perfection. We have seen the process of such changes separately through each period. Let us give a general view of the process through which the burden of military service has gradually increased. It will be convenient, if we divide our survey into (1) the term of service and its nature; (2) exemption from services, and postponement of and exemption from enrollment; (3) the sphere of the operation of the law, and (4) the increase in the number of men enrolled.

Term of Service and Its Nature

Above all, changes in the term of service call for our attention. Although the different periods of the military service are distinguished from each other by such names as the active, the active reserve, the reserve and the supplementary service, yet there is one point common to all these services, in regard to the expansions of the list of men in each service. It is a

considerable extension of the term for the military service as a whole, except the militia service. This is shown by the following tables:

ARMY

Year	Active	Active Reserve	Reserve	Total	Supplementary
1873.....	3 years (Regular)	2 years (1st res.)	2 years (2d res.)	7 years	1 year (90 days aft. 1875)
1879.....	3 years (Regular)	3 years	4 years	10 "	1 year
1883.....	3 years	4 years 7 yrs. (1st res.) 5 yrs. (2d res.)	5 "	12 "	1 "
1889.....	3 "	4 years	5 "	12 "	1 "
1895.....	3 "	4 years & 4 mos.	5 "	12 yrs. & 4 months	7 yrs. & 4 mos. (1st sup.) 1 yr. & 4 mos. (2d sup.)
1904.....	3 "	4 years & 4 mos.	10 "	17 yrs. & 4 months	12 yrs. & 4 months

NAVY

Year	Active	Active Reserve	Reserve	Total	Supplementary
1889.....	4 years	3 years	5 years	12 years	1 year
1895.....	4 years	3 years	5 years	12 years	1 year
1904.....	4 years	3 years	5 years	12 years	1 year

Since the enactment of the Imperial Ordinance in 1907, concerning the two years' active service, men of the active service in the army are permitted to go home, at the expiration of two years' term.

We have no means of knowing the actual character and nature of the military service. It is almost impossible to know what changes there have been in barrack life and how restrictive the life has been. We can, however, get some information concerning these points if we look at the length of the term and the various conditions for exemption and postponement.

Active Service.—First of all, let us turn our attention to those rules concerning the release of soldiers. In the conscription law as enacted for the first time is found the following statement:

Those of the standing army (regulars) must be in service for three years, but in peace time they may be permitted to go home when they have served at least two years and when they prove proficient in their service. There has since been no change in this respect. The law revised in 1883 says:

> Those of the active service, who prove to be especially skilful in their arts and excellent in their conduct, or those who are in possession of certificates for military training at the different government schools—these may be permitted to go home even before the expiration of their term.

However, it is a mistake to think that, compared with the above statement, the conditions for release were made somewhat lenient. For we find that such a privilege had already been given to the graduates of the said schools, by the ordinance of 1879, and that the ordinance of 1889 deprived them of the privilege. This privilege was replaced by the privilege of the one-year volunteer service and six-weeks active service. Imperial Ordinance No. 332, issued in 1907, concerning the two years' service and the release, states:

> Those men in the active service, in the infantry or in other branches, may be permitted to go home when they have acquired full knowledge of their arts, at the end of a two years' term (clauses 1 and 2, Imperial Ordinance No. 332).

This provision, however, can by no means be construed as mitigating the burden. It means quite the contrary, for the provision aims at the raising of more men for both the active and the reserve service, with the same amount of expenditure.

Active Reserve and the Reserve Service.—According to the Imperial Ordinance issued in 1879, officials, headmen of villages, religious teachers, teachers in government and prefectural schools, members of prefectural assemblies and those in possession of licenses for medical profession were exempted from enrollment. But the provision for this privilege was

dropped from the law by the ordinance of 1883. The only mitigation in service now consisted of the exemption of the active reserves and the (second) reserves from the calling out for inspection once a year. Even this small mitigation was upon the condition that the state council may require them to come out, in such cases as are deemed necessary (clause 20). Later, in 1889, there were made some more changes in this respect, in which those government or prefectural officials, whether in the active reserve service or in the (second) reserve service, were exempted from the calling out, in case their substitutes can not be obtained. The same provision was made for members of different assemblies, organized according to law, while in session.

Supplementary Reserve Service.—At first, this was not regarded as a proper and independent service, but consisted of men under the general name of "*hojuhei*" (those in reserve for any vacancies in the list of the other services). It was by the ordinance of 1895 that this service came to be recognized as an independent service, when the "vacancy-fillers" were ordered to come out for inspection or review, on a peace footing. A glance at the changes in the provisions for this newly organized service, will show the following facts: According to the conscription law, enacted in 1873, these "vacancy-fillers," or supplementaries, were called out for one year, only when there were vacancies. (The term was only ninety days, from 1875 to 1879.) This remained the same in the law revised in 1879. However, in the ordinance of 1883, we find some changes in this respect. The ordinance required them to come out, according to the number of the lot, and serve in the army for one year, not only when vacancies occurred in the list of the active service, but also when emergencies required more men. The ordinance also contained a provision for another kind of reserves to be regarded as supplementaries, who have completed the one year's service, or those who were postponed from enrollment for seven years. They were to be called out in cases of emergency and enlisted in the commissariat or other services. In the ordinance of

1889, a provision was made for calling out these supplementaries under the name of *yobi-choin* (men called out as reserves), but this was merely a matter of name and contained no change in substance. It contained no provision for the *yobi-chohei*, conscript reserves, such as we found in the ordinance above.

As has already been stated, this supplementary service came to be recognized as an independent service, by the amendment of the law in 1895. This service is of two kinds. The first supplementaries (like the naval supplementaries) are to fill vacancies in the active service, and are to be called in case of war or emergency, besides serving in the army for one hundred and fifty days. They are, in this respect, like the reserves. The second supplementaries are to be called out, after the first, when there is need for more men. By another amendment in 1906, the provision for the second supplementaries was removed. But this did not mean mitigation of the burden on the people. Departmental Order No. 72, issued in October, 1908, declared that the supplementaries would not be called out for the time being. We see, however, that the provision is now revived, without any change in the wording.

From the above, it is quite plain that not only was the term of service extended, but the burden of the service upon the people made heavier. This increasing burden of the service, both in its term and its effect upon the people, shows the tendency toward militarism. We shall find the same situation when we proceed to the next subject.

Exemption and Rejection from Service and Postponement of and Exemption from Enrollment

The conditions for rejection from service were penal servitude, or a heavier punishment, according to the ordinance of 1873; one year's penal servitude or more, and one year's imprisonment or more for political offenses, according to that of 1879; and felony, according to the ordinances of 1889 and later years. Thus we see no real changes in the conditions all through these years.

As to the exemption from service, no provision for it is found in the ordinance of 1873. This absence of provision was due to the fact that there was as yet no distinction between the exemption from service and that from enrollment. Concerning the provision for the inveterately diseased and deformed, there has never been any change since the issue of an ordinance in 1879, according to which they are to be exempted from service, if they are found, after examination, to be unfit for it. The regulations concerning the medical examination have since undergone changes, into which we need not go now.

Remarkable were the changes in the conditions for exemption from and postponement of enrollment. It is these changes that show vividly the stages through which our conscription system has advanced towards militarism, by which is here meant the idea of the eligibility of the whole people for service without any distinction. Militarism, considered from the viewpoint of postponement and exemption, has had to encounter various difficulties, of which the greatest were the family system and the privileged class. Let us now see how influential was the family system in giving a check to the expansion of armaments.

According to the conscription law enacted in 1873 the following were exempted from enrollment: (1) the head of a family, (2) heirs and lineal grandsons, (3) the only sons and grandsons, (4) those who take the place of their fathers or elder brothers in the family, on account of sickness or some other circumstances of the latter, (5) adopted sons, and (6) brothers of those who are in service. It is now plain that of these six conditions, the first five were meant for the continuance of the family, while the sixth was meant to contribute to its prosperity. But each of the above conditions has undergone changes by the successive revisions of the law. In 1879, the following changes were introduced: (1) the head of a family is exempted from enrollment, but those are not who set up a new family, or assume the name of the wife setting up a new family, or revive an extinct family,

or succeed a head under fifty years of age as his adopted heir. (2) Heirs and lineal grandsons are not necessarily exempted from enrollment; they are exempted (a) when the head is above fifty years of age, (b) or when the head is under the said age in peace times. (c) But those younger brothers who become heirs are not exempted when their elder brothers, previous to the age of conscription, establish new families, are adopted by those under fifty years of age, revive extinct families, or adopt the name of the female head, establishing a new family. (3) The only sons and grandsons, when they are heirs or lineal grandsons. (4) Those taking their father's or elder brother's place in the family are exempted from enrollment, when they are the heirs, but, if they are not the heirs, they are granted postponement for one year in peace time. They will be exempted from enrollment, when their condition remains unchanged, even at the time of the examination that takes place in the third year of the regular service. But this exemption occurs only in peace time. (5) The adopted sons of those who have no heirs at the age of fifty years or up are exempted from enrollment, but not if they are the heirs of retired persons. The heirs or adopted sons of those who are under fifty years but are inveterately diseased or deformed, are exempted from enrollment. (6) Brothers of those in active service are no longer exempted from it unconditionally. Only one brother of noncommissioned soldiers in active service, whether in the army or the navy, is granted postponement of enrollment, and in peace time only.

The conscription law of 1883 also shows the gradual restriction of the conditions intended for the protection of the family. (1) The head of a family is granted postponement of enrollment only in peace time, but those are not who are (a) the head of the dependent house (*fuseki-koshi*), (b) the heads of new families, of extinct or abolished families, and (c) the heads who succeed those, under sixty years of age, not deformed or inveterately diseased, nor incapable of supporting their families, nor punished for grave offenses. (2) Heirs or

lineal grandsons are exempted from enrollment, (a) when the head of their family is above sixty years of age, (b) or when the head is inveterately diseased or deformed. This exemption takes place only in peace time, when postponement extends for three years and has so many exceptions that there is no room left for any devices to escape enrollment. According to the old law, the heirs or grandsons of those even under fifty years were exempted from enrollment, but they are now to be enrolled, if the latter is under sixty years. (3) No change, as to the only sons or grandsons. (4) Those taking their father's or brother's place in the family are now granted postponement of enrollment in peace time, only when they are heirs or lineal grandsons. They are exempted from enrollment, only when their conditions remain the same, even in the third year of postponement. Thus the privilege given to those taking their father's or brother's place in the family is well-nigh disappearing. (5) No privilege for adopted sons. As to the cases in which they are heirs or grandsons, see (2) above. (6) The elder or younger brother of those in active service is granted postponement only in peace time; one of several brothers is granted postponement only in peace time, if they happen to be called out at the same time; the enrollment of the elder or the younger brother of those becoming sick, or wounded, while in service, is postponed only in peace time, and they are exempted if this condition remains for three years.

From the above, it is now quite plain that the law revised in 1883 has reduced the conditions or privileges for postponement or exemption to much rarer cases than those provided in the laws of 1873 and 1879. Yet, even in this law, we can find some traces, slight as they are, of the spirit that makes for the family system. It is by the law revised in 1889 that all these conditions were done away with. The whole people, whatever their family relations may be, are now to be enrolled, the only exception being the case in which a family can not get along without the man to be called out, and this only when there is positive proof of the condition in

question. If this condition still remains even at the end of the third year, then he will be registered in the list of the militia. Needless to say, this last provision is not to be construed as meaning the protection of the family system.

So much for the changes in the conscription law in its relation to the family system. Let us now go a step further and see how the privileged class has stood in the way of militarism. The protection of the privileged class can be seen from the three following aspects: (1) Exemption from enrollment for those who pay a certain amount of money, (2) exemption from enrollment for those of certain professions or certain social standing, and (3) postponement of exemption for the residents or graduates of certain schools.

(1) Exemption from Enrollment Obtained with a Certain Amount of Money.—It was provided in the law of 1873 that those paying 270 *yen* as the "proxy-fee" were free from service, except in the militia. Now, at that time this amount of money was about equal to 270 *koku* (a *koku* is about 5 bushels), and is equal to 2,000 *yen* today. Hence, we see that those who obtained this privilege were comparatively few in number. The law revised in 1879 contains a similar provision for those who pay the exemption or proxy-fee of 270 *yen*, or for those who pay 135 *yen*, when they are to be called out on the peace footing. No such provision, entitling a man to postponement or exemption on payment of a sum of money, is found in the law of 1883.

(2) Members of Certain Professions and Social Standing.—It was provided in the law of 1873 that departmental and prefectural officials were to be exempted from enrollment (clause 3). This privilege was extended by the law of 1879 to (a) the officials above *hannin* rank, religious teachers above probationary rank, and headmen of villages, (b) members of prefectural assemblies, (c) teachers of public schools and teachers of schools under the direct control of the educational or other departments and offices, and (d) those of different departments, bureaus and offices, whose place can not be filled by others. But a great change was introduced

in this regard by the law of 1883, limiting this privilege to the narrowest possible sphere. The tendency is clearly discernible to limit this privilege to those who are necessary for the advancement of culture.

According to this law, all those provided in (2) above were excluded from the privilege, while those officials could be granted postponement of enrollment whose substitutes were not obtainable. And even this postponement was possible only after the case had gone through the state courts. Teachers in public or government schools were exempted from enrollment only when they were in possession of diplomas conferred at government or prefectural schools. Those coming under the provisions above, (a), (b) and (c), and those possessing diplomas conferred by government or prefectural medical schools and engaging in medical practice, were exempted from calling out for inspection or review, if they were in the active reserve or the reserve service. It was by the law of 1889 that this privilege was entirely abolished, except for the officials mentioned above and the revenue officials and deputy mayors of cities, towns and villages, who were exempted from the calling out for review or inspection. As to the provision by which members of the different assemblies instituted by law were exempted from the calling out, we may well regard it as a necessity, rather than as a privilege given to certain classes.

(3) Privileges Given to the Graduates and Residents of Certain Schools.—It was provided in the law of 1873 that the privilege of exemption from enrollment could be obtained by those who specialized at the schools under the direct control of the Educational, the Engineering, and the Colonial Department, or by those studying abroad, or by those possessing licenses for the practice of medicine or veterinary surgery. In 1879, the following slight changes in these provisions were introduced: (a) Those in possession of medical licenses, (b) graduates of public normal schools, (c) graduates of public middle schools or of public technical schools, (d)

graduates of the schools under direct control of the Educational Department or of other departments and offices, (e) those studying abroad and possessing certificates for at least a two years' course of study. In 1883, this was narrowed to the regular students of government universities, or government schools on an equal footing with them, who had finished at least a two years' course. In 1889 all these conditions were abolished.

With regard to the privilege of postponement given to the graduates and students named above, we find the following changes: In 1879, this privilege was given to (a) students who had finished at least a one year's course at government schools or at prefectural normal schools, (b) who had finished at least a three years' course at public middle schools or at public technical schools, and (c) who were staying abroad for study, postponement for one year, and exempted from enrollment on peace footing, when still staying away, through three successive postponements. In 1883, this privilege was limited to (a) regular students of government universities or government schools on equal footing with them (exempted from enrollment on peace footing, after successive postponements for seven years), and (b) students of government or prefectural schools, who had finished at least a one year's course. In this case, the postponement was for six years. In 1889, the provision (a) was abolished, students under this provision being treated in the same way as those under (b). At the same time, this privilege of postponement was extended to students of certain private schools, the provision for which runs as follows:

> The privilege of postponement of enrollment until the age of twenty-six obtains to those whose names are registered at government schools, prefectural normal schools, prefectural middle schools, private schools recognized by the educational minister as on an equal footing with middle schools, or private schools where law, politics, and political economy are taught according to the rules approved by the minister; the same privilege for those who stayed abroad.

In 1895, the age limit was extended to twenty-eight years. There has since been no change in this provision. Either the

one-year volunteer service or the six weeks' active service may be regarded as a privilege similar to that above.

We have thus far traced the different stages through which the provisions for various sorts of privileges have been abolished, one after another. The only privilege now remaining is the privilege that obtains to the graduates and undergraduates of certain schools. Even this privilege has been reduced to the narrowest possible limits. There are now some who advocate the abolition of this privilege. But this would probably be impossible, for the privilege is intended not so much for the protection of certain classes as for the advancement of education and culture. The further reduction of the privilege may, however, be effected before long.

The Sphere of the Operation of the Law

The conscription law enacted in 1875 does not make any reference to conscription in Hokkaido, the Loochoos and the Bonin Islands, except the clause in which mention is made of the defense of Hokkaido. According to the law revised in 1879, conscription seems to have been enforced in the province of Hakodate alone of all the provinces of Hokkaido. In 1884, conscription is said to have been enforced at Hakodate, Esashi and Fukuyama. It was in 1896 that we find it enforced in the four provinces of Oshima, Shiribeshi, Iburi and Ishikari, and in 1898 that conscription was enforced in the seven provinces of Teshio, Kitami, Hitaka, Tokachi, Kushiro, Nemuro and Chishima.

But the enrollment was temporarily to be postponed for the immigrants whose period of domicile in these provinces was less than five years after its registration (Imperial Ordinances Nos. 126 and 336 issued in September, 1895, and August, 1899, respectively). Imperial Ordinance No. 258, issued in July, 1897, refers to the enforcement of conscription in the islands of Okinawa and Ogasawara from the first of January, 1898.

Increase in the Number of Soldiers

Table I.—Increase of Ratio of Conscripts to Men of Conscript Age[1]

Year	Conscripts per 100 Men of Age	Conscripts per 100 Men Examined	Year	Conscripts per 100 Men of Age	Conscripts per 100 Men Examined
1880	18,173	....	1896	17,831	41,244
1881	10,932	....	1897	35,731	35,185
1882	11,953	....	1898	29,821	42,265
1883	11,756	....	1899	35,417	43,526
1884	....	....	1900	....	44,376
1885	46,566	....	1901	....	44,691
1886	45,837	....	1902	....	45,794
1887	....	....	1903	....	53,349
1888	25,056	....	1904	....	66,000
1889	25,903	....	1905	....	78,107
1891	46,097	....	1906	....	50,707
1892	41,763	....	1907	....	59,169
1893	41,702	37,280	1908	....	57,426
1894	28,079	31,787	1909	....	56,759
1895	27,688	20,747	1910	....	59,468

Table II.—Yearly Increase in the Number of Soldiers

Year	Officers	Semi-officers and Noncommissioned Officers	Men	Total
1887	2,262	5,682	47,607	55,551
1888	2,432	5,795	48,112	56,339
1889	2,520	5,457	49,212	57,189
1890	2,449	5,670	49,463	57,582
1891	2,500	5,803	51,283	59,586
1892	2,475	5,868	52,583	60,926
1893	2,495	6,319	54,554	63,368
1894	3,268	11,674	146,722	161,664
1895	....	....	....	....
1896	3,341	10,872	87,411	101,624
1897	3,822	12,504	104,801	121,127
1898	4,308	14,494	124,328	143,130
	Men Above Semi-Officers	Specialists Attached to Different Officers	Men Below Noncommissioned Officers	
1899	6,863	4,124	132,311	143,298
1900	7,216	4,095	129,678	140,989
1901	7,705	4,441	131,514	143,660
1902	7,913	4,175	134,899	146,987
1903	8,127	4,080	138,610	150,817
1904	....	....	....	....
1905	....	....	....	....
1906	11,064	5,406	....	....
1907	12,400	4,831	173,712	190,943
1908	12,269	5,540	197,898	215,707
1909	12,326	5,408	207,957	225,691
1910	12,640	5,594	212,824	231,058
1911	13,086	5,532	214,476	233,094
1912	13,411	5,541	217,032	235,984

[1] This is a summary of the tables already given above, under each heading.

PART II

ECONOMIC EFFECTS OF THE SYSTEM OF CONSCRIPTION

CHAPTER I

INTRODUCTION

Only forty-two years have elapsed since the establishment of the system of conscription, but many have been the changes introduced, as we have seen in the first part of this treatise. If we wish to know its economic effects, we must see how each of the stages of this system has affected the economic conditions of the corresponding period, and how the changes in the system have been accompanied by corresponding changes in our economic world. There is no doubt that the influence of conscription upon economic conditions is an important subject. But it is not for us to know it as an apparent, obvious fact, but as a matter based upon inferences. We, however, deem it too tedious for our purpose to repeat the inferences at each period or stage. Let us therefore limit the sphere of our investigation to the economic effects of the system at present. Before entering upon our subject, it may be necessary to state here the reasons why our conclusions must be based upon indirect inferences. It is an easy matter to know the economic effects of temporary events, such as wars or natural calamities. But we find it very difficult to ascertain the economic effects of things or events that are in permanent existence, very difficult to distinguish the effects from institutions of permanent and constant existence. The degree of the effects will only be known after a very careful examination of complicated circumstances. The system of conscription has never been abolished or reestablished, and is one of the very things that are permanent and constant in their existence. Hence, our dependence upon indirect inferences in our investigation of its economic effects. One may think that they might easily be observed at the time of its establishment. We must, however, take into consideration the fact that the country was then in a very confused and disordered condition, not only as regards the system of

conscription, but also in almost all other respects, so that it is very difficult to point out the economic effects alone of conscription. Even supposing that we might do this to a certain extent, it would be of no direct advantage to us, because circumstances in those times were so different from those of the present that the inference from one are of little avail for the understanding of the other. Besides, most of the circumstances in those times are now beyond our reach.

We must make our problem still more definite. The system of conscription is the backbone of our military preparations, especially of our army. All acknowledge the fact that the armament of a nation has great effects upon its economic conditions, according to its foreign policy. The armament is necessary not only for the defense and utilization of newly acquired territories, but also for the extension of markets. Besides, so long as armed peace is a necessity for all nations, the armament is, of course, a guarantee of their economic life at home. The maintenance of armaments by taxes and "blood taxes" must therefore be an insurance system on a large scale. But we must extricate ourselves from such considerations for two reasons. The economic effects of armaments through foreign policies are so vague and far reaching that they are beyond our definite and exact calculation. And the other reason is that—even admitting that calculation of such effects is possible—we can then only know the effects as those of armaments, and not of conscription. To try to distinguish the economic effects of conscription in such a calculation is as if we were to try to assign to one hand a definite quantity of sound from the clapping of both hands. Such being the case, let us now study the economic effects of conscription, putting aside the question of foreign policy and its relation to economic life.

Our problem is, what are the economic effects of the system of conscription, by which hundreds of thousands of the able bodied are yearly taken from productive labor? Let us begin with the effects upon the population. For, of all the condi-

tions that affect the economic life of a nation, the most important is the population in its relation to conscription.[1]

Our next task is to see its effects upon the national economic life in two aspects, namely, production and consumption; and then to obtain a general view of the effects.[2] We shall then proceed to a survey of the effects upon the domestic economy of those who participate in this national economy.[3] Our last task is to give a summary of our results.[4]

[1] Chapters II and III.
[2] Chapters IV, V, VI, and VII.
[3] Chapter VIII.
[4] Chapter IX.

CHAPTER II

EFFECTS ON POPULATION

Of the factors of population that control economic life, increase and concentration are the most important. Our survey will then fall under the two headings: What are the effects of conscription upon the increase of population? And what are the effects of the same upon concentration? On the increase of population, we must consider the effects of conscription upon birth rates and death rates. Those who are in the active service must stay away from home for two, three or four years, and this must mean a decrease of the birth rate. Another aspect that must be considered in connection with these rates is the fact that the training in the army is conducive to health, which reflects upon the birth rate. Looked at from the other viewpoint, this would lower the death rate among them. As to concentration, the existence of barracks in cities or nearby causes a concentration of population. The tendency of these men to live in cities, even after their barrack life is over, and the tendency of the places where troops are stationed to absorb inhabitants from the surrounding districts, are also instrumental in bringing about the results in question. The present chapter deals with the influence of the economic effects upon the increase of the population.

Birth Rates

Decrease of Birth Rate Due to Barrack Life

Those joining a corps are not permitted, except for a few days after the enrollment, to return home for two years in the case of infantry men, three years in the case of the men of other branches, and four years in the case of sailors. They are all permitted to go home on Sundays, but not permitted to stay at home over night.[1] It follows then that there are

[1] Of the men belonging to special branches in the army, the assistant artillery men, artillery transport men, commissariat men, and nurses are in their respective

almost no cases in which the wives of the married soldiers have opportunities to conceive. Of course, in those societies where the custom of conception-prevention or abortion obtains, owing to the anxiety of living, barrack life may mean only postponed birth, and the life has nothing to do with the birth rate of the whole population. But with the present state of our people, it is not too much to say that the impossibility of conception during these years of barrack life means a corresponding decrease of the birth rate. To what extent then are our yearly birth rates affected by such a life? In order to know the rates, we must first know the number of married men in active service, but we have no means of ascertaining this. The only way would then be to resort to inferences from other facts.

Presumptive Number of Married Men in Active Service.—Since it is very rare that men get married during the term of service, these actives must have married previous to enlistment. In order to estimate their probable number from the rate of the married men at large, we must base our calculation upon the men of twenty or twenty-one years of age, that is, the men who are of the same age as those enlisted. The statistics that show the number of the married and the unmarried, according to age, are published every five years.

TABLE FOR 1908, AS OF DECEMBER 31[1]

Age	Married		Unmarried		Total	
	Men	Women	Men	Women	Men	Women
19–20.....	17,876	92,119	448,094	359,114	465,970	451,233
20–21.....	33,133	128,060	421,197	309,228	454,330	437,288
21–22.....	45,100	155,881	367,110	248,851	412,210	404,732

services for two years and four months. The first of these live in barracks for one year, the second for four months, the third for three months and the fourth for four months. Noncommissioned officers, gendarmes and musicians are permitted to live outside. Certain classes of men such as guardsmen, corporals, accountants, etc., may be permitted to live outside.

[1] Figures taken from *Imperial Statistics*.

The ratio of married men to the total:

Age 19–20	3.80 per cent
" 20–21	7.30 per cent
" 21–22	13.30 per cent

TABLE FOR 1903, AS OF DECEMBER 31[1]

Age	Married		Unmarried		Total	
	Men	Women	Men	Women	Men	Women
19–20	20,253	94,174	397,700	295,680	417,953	410,904
20–21	36,401	134,901	398,991	316,730	435,392	430,581
21–22	55,256	163,786	373,869	252,611	429,125	416,397

The ratio of married men to the total:

Age 19–20	4.8 per cent
" 20–21	8.3 per cent
" 21–22	12.9 per cent

From the two tables above, it is seen that the percentage of the married who are of the same age as enlisted men, was 8.3 per cent in 1903 and 7.3 per cent in 1908. Now, even granting that the rate has since fallen, it is reasonably certain that the rate at present is not below 6 per cent. We may expect the same rate among the men in the army. The probable number of married actives would then be the number of those in the active service multiplied by this rate.

Army[2]

Number of men, including noncommissioned officers	212,824
Number of experts attached to different offices, schools, etc., including noncommissioned officers	3,078
Total	about 215,900
Those noncommissioned officers living out of barracks	about 3,300[3]
Balance of men and noncommissioned officers living in barracks	about 212,600

[1] Figures taken from *Imperial Statistics*.

[2] Military Department Statistics, 1910.

[3] This figure is obtained in the following manner: The number of noncommissioned officers at home, 11,442, plus that of those abroad, 2,050 (probably), plus that of experts, attached to different offices, 3,078, gives the total of noncommissioned officers as 16,570. The ratio of those outside the barracks to those in the barracks is approximately one fifth. The total multiplied by one fifth is 3,314. For the sake of convenience, we omit the figures 14, and the result is 3,300.

Navy[1]

Number of noncommissioned officers and men (noncommissioned officers, 9,996, and men, 35,580)		45,576
Presumptive number of volunteers (one half of the total above)		22,788
Balance of noncommissioned officers and men (the other half of the total)		22,788
Presumptive number of noncommissioned officers living outside naval stations (half of the total number)	about	5,000
Balance of men living in naval stations	about	17,200
Total (army and navy)	"	229,800

The whole number of those in the active service (both in the army and the navy) is presumably 230,000. Now, supposing the 6 per cent of this number as constituting the number of the married, we obtain 13,800.

Annual Birth Rates to Married Women.—Supposing women ranging from fifteen to forty-two years of age as capable of production, the number of married women, according to statistics prepared on December 30, 1908, is as follows:

Age	Married Women
15–20	193,978
20–25	902,999
25–30	1,315,482
30–35	1,341,403
35–40	1,068,154
40–42	442,387
Total	5,264,403

The number of births in 1908 was 1,508,365; in 1907, 1,466,914. The ratio of this number to the number of married women is 1 to 3.6.

Decrease of Birth Rate, resulting from Conscription.—If the 13,800 of the men we have seen above had remained at home, their wives would have given birth to about 4,000 children (that is, $13{,}800 \div 3.6 = 3{,}833$) annually. Moreover, if they had remained at home, they would have married earlier than the age at which their term of service expires. And this means that conscription makes the birth rate still less by postponing marriage. Putting aside this question for the time being, we find some other reasons for considering the figure 4,000 as too small, and these are:

[1] Navy Department Statistics, 1911.

(1) Early marriage obtains more in the country than in cities.

(2) The rate of conscription for active service from the country is greater than that of conscripts for the same from cities.

Let us now look at the evidences for these statements. The ages of marriage in the three urban prefectures, whose centers are Tokyo, Kyoto and Osaka, and in the five rural prefectures, Miyagi, Fukushima, Iwate, Aomori, and Yamagata, in 1904, were as follows, the population of the two groups being approximately the same.

NUMBER OF MARRIAGES AT A GIVEN AGE—URBAN PREFECTURES

Age	Tokyo	Kyoto	Osaka	Total
15–16	0	0	1	1
16–17	4	1	1	6
17–18	31	29	47	107
18–19	81	42	78	201
19–20	119	89	133	341
20–21	316	203	313	832
21–22	614	317	484	1,415
22–23	818	425	729	1,972
23–24	1,074	599	818	2,491
24–25	1,189	639	1,021	2,849
25–26	1,301	781	1,174	3,256
26–27	1,327	793	1,138	3,258
27–28	1,212	700	1,077	2,989
28–29	1,058	601	898	2,557

NUMBER OF MARRIAGES AT A GIVEN AGE—RURAL PREFECTURES

Age	Miyagi	Fukushima	Iwate	Aomori	Yamagata	Total
15–16	0	3	3	0	1	7
16–17	6	29	19	11	7	72
17–18	135	259	319	200	189	1,102
18–19	193	338	338	298	257	1,424
19–20	293	480	503	366	368	2,010
20–21	465	662	620	532	474	2,753
21–22	544	759	649	586	567	3,105
22–23	600	759	585	593	593	3,130
23–24	728	753	611	646	664	3,401
24–25	653	723	549	565	641	3,131
25–26	596	661	444	464	626	2,791
26–27	541	536	312	364	536	2,289
27–28	447	470	270	268	453	1,908
28–29	335	357	229	215	362	1,498

In the three urban prefectures, the greatest number of marriages takes place at the age of twenty-six or seven, while in the five rural prefectures, at the age of twenty-three or four. If we now compare the number of the married at the age of fifteen to twenty with the whole number of the married of all the ages given above, we shall see that the age of marriage in cities is considerably higher than that in the country.

	Marriages between 15–21	Total Number of Marriages	Per cent under Age of 21
The three urban prefectures[1]	656	37,949	1.7
Five rural prefectures	7,368	37,021	19.9

The following table compares these figures with those of the married men alone in Tokyo, ranging from nineteen years of age to twenty-four years:

Age	Married	Unmarried	Total	Married Men in Tokyo	
				Per cent of Total in Tokyo	Per cent of Total in Country[2]
19–20	111	9,212	9,323	1.1	3.8
20–21	197	8,940	9,137	2.2	7.3
21–22	340	8,008	8,348	4.1	13.3
22–23	759	8,805	9,564	7.9	16.7
23–24	1,218	8,195	9,413	12.9	22.6

We are now to see how the number of men from the country in active service is greater than is that from the cities. The rates in the urban prefecture of Kyoto are as follows:

	Men of Age	Actives	Men of Age per One of Actives
The city of Kyoto[3]	3,291	652	5.04
Rural districts	6,199	1,537	4.03

The same situation obtains in the prefecture of Tokyo:

	Men of Age	Actives	Men of Age per One of Actives
The city of Tokyo	14,351	2,033	7.06
Rural districts	7,805	1,665	4.69

[1] No data were obtainable for comparison of cities with urban prefectures.
[2] Seventh Statistical Report for 1908 by the city of Tokyo.
[3] Statistical Report for 1911 by the city of Kyoto.

The fact that people in the country marry earlier than those in cities and that a comparatively greater number of men of age in the country is enlisted in active service shows that there are really more married men in active service than the calculation based on the average of the whole people indicates. Accordingly, the decrease of birth rates, caused by the barrack life, must be greater than the 4,000 we have obtained without taking this circumstance into consideration. However, we have no means of ascertaining how much greater it is.

The decrease of birth rates is not a matter of mere inference. During the Russo-Japanese War the rate actually diminished, owing to the fact that men were away from home. We must admit that not only such great events as the Russo-Japanese War, but also lesser events of similar nature have always to do with the decreased rates. In connection with this, we give below the birth rates per 1,000 of the population,—32.9 in 1902; 32.0 in 1903; 30.6 in 1904; 30.6 in 1905; 29.1 in 1906; 33.2 in 1907; 33.7 in 1908. The years 1904, 1905 and 1906 were the years in which the people were engaged in the Russo-Japanese War.

Development of the Physique

We shall see later how barrack life is conducive to the development of the physique. And it is certain that such a life increases the vitality of men to such extent that it results in a diminished death rate, which in turn exerts a favorable influence upon the birth rate. As to the extent of this influence, it is not possible for us to show in exact figures. One thing that claims our particular attention is the fact that the birth rate in this country has increased with the development of the system of conscription. Of course, we do not know whether the increase is due to economic causes, or to what extent it has been affected by the system. At any rate, this is rather a remarkable fact, when we see that the general tendency among civilized nations is in the opposite direction.

BIRTH RATE PER 1,000 POPULATION

Year		Year		Year		Year	
1872	24.1	1882	26.8	1892	28.5	1902	32.9
1873	24.6	1883	25.8	1893	28.9	1903	32.0
1874	25.3	1884	26.7	1894	29.5	1904	30.6
1875	26.1	1885	27.3	1895	30.0	1905	30.6
1876	25.5	1886	27.1	1896	....	1906	29.1
1877	24.5	1887	29.6	1897	30.9	1907	33.2
1878	24.4	1888	30.2	1898	31.8	1908	33.7
1879	24.3	1889	28.3	1899	31.4	1909	33.9
1880	25.6	1890	26.7	1900	31.7	1910	33.9
1881	24.7	1891	29.4	1901	33.1	1911	34.0

This increase of the rates is not due to the increase of the rates of marriage.

NUMBER OF THE MARRIED PER 100 FEMALES

Year		Year	
1788	18.73	1903	17.61
1893	18.39	1908	17.31
1898	18.23		

DEATH RATES

The system of conscription has also affected the death rate of the population. It is now forty years since the establishment of the system, during which time there have been several wars of varying magnitude. Many soldiers were killed and wounded. In the Russo-Japanese War alone, sixty-five thousand were disabled, of which some fifteen thousand[1] were still living at the end of 1912, all others having died in the course of five or six years. The number of deaths and the death rate due to the direct effects of wars must be great. But this can not be regarded as the effect of the system of conscription.

By the effect of this system upon death rates is meant the effect of the military service and training. It is insisted upon, among the European nations, that conscription has caused a decrease of death rates to a considerable extent. But we are not able to say for certain that this is also the

[1] *Osaka Mainichi*, December 16, 1913.

case in Japan, because our statistics at the beginning of the Meiji Era were very imperfect.

A comparison of death rates before and after the increase of the standing army, accompanying that of the divisions, will enable us to see whether or not our system of conscription has caused a decrease in death rates. For this purpose, let us first compare the death rates before 1898–1899 with those after these years, and those before 1908–1909 with those after these years, limiting the age of men to from twenty-five to thirty-five. At the outbreak of the Sino-Japanese War, the number of the enrolled was suddenly increased, and this tendency to increase the number was kept up by the organization of the five new divisions immediately after the war. Now, those whose age fell between twenty-five and twenty-six in 1898–1899 were already within the scope of the increase, while those above twenty-seven years of age escaped it. In 1908–1909, all those above fifteen years and below thirty-five years were within the scope of the increase. The following is a comparison of the death rates in each of the two periods

ANNUAL DEATH RATE PER 1,000 MEN

Year	Age										
	25	26	27	28	29	30	31	32	33	34	35
1898–1899	8.38	7.76	8.10	8.08	7.88	8.38	7.73	8.77	8.47	7.72	8.31
1908–1909	8.80	8.46	8.00	7.84	7.68	7.68	7.00	7.72	7.66	7.71	8.08

above with those of the ordinary men, whose age corresponds to each of the ages above. Before showing the comparison, a word is necessary to explain our method of calculation. We base the number of population and the death rate upon "The Static and Dynamic Statistics of the Population of Japan." The average death rate of each of the two years above is divided by the total number of the ordinary men

of the corresponding age in 1898–1899 and in 1908–1909, respectively. It is necessary for the divisor to be the average of the men of the same age in the two years above. As our static statistics give the number of the population, according to ages, only every five years, we are obliged to use the average of men for one year.

From the above table, it is seen that death rates are less in the case after the increase of enrolled men than in the case before the increase. Those of twenty-five or six years of age, who are not at all under the influence of the increased enrollment, or are under the least influence of it, have higher rates than those before the increased enrollment. There may be some other reasons for this, which we are not able to state here.

We can not ascribe this decrease of death rates to the advancement of medical sciences, or to the progress of sanitary conditions. If such is the case, there should not be any difference in the rates between men and women, whereas we find the rates for women somewhat on the increase in 1898 and 1908. Of course there may be particular reasons for this, but we can hardly consider it as due to the progress of medicine or hygiene. We rather believe that the increase of enrollment is at least one of the important causes of the decrease of the death rate.

DEATH RATE PER 1,000 WOMEN

Year	Age				
	26	27	28	29	30
1898	8.22	7.95	7.82	7.80	8.89
1908	10.45	10.79	10.34	10.31	10.02

SUMMARY

We have seen that the system of conscription gives rise to the two contrary effects. It causes a decrease of birth

rate, on one hand, while it causes an increase of birth rate and a decrease of death rate, on the other.

We can not say definitely which of these two effects has the tendency to predominate over the other, because we can not measure the definite quantity of the latter. At any rate, we can say that the effects of the system upon these several rates are not very great. True, we have seen the birth rate decrease temporarily, owing to the absence of men for two or three years. The decrease of the birth rate may have left its effects not only temporarily, but also for several years to come. But, as such effects can not be regarded as due to the system of conscription, we leave the matter as it stands, without entering into further details.

CHAPTER III

EFFECTS ON THE DEVELOPMENT OF TOWNS

As has already been stated, the effects of the system upon the concentration of population may well be viewed from two aspects. The concentration caused by the tendency among the discharged soldiers to live in towns is one. The other is the tendency among the people at large to crowd together into the towns or places where troops are stationed. Let us now take up each of these two aspects.

Concentration of Soldiers in Towns

A general tendency has developed among our agricultural people to leave their native homes and to crowd together in towns. Does not the system of conscription encourage such a tendency? The reasons that it does so are plain. Barracks and naval stations are usually located in towns, or in their neighborhoods. Naval stations and places for anchorage are mostly located in towns containing more than one hundred thousand inhabitants. Of the seventy-six infantry regiments, only sixteen are stationed outside cities or suburbs. And of these sixteen regiments, all except four are stationed in towns of above ten thousand inhabitants.[1] Those who live a rigorous life in the barracks, away from comforts of home, must find compensation in the pleasure of cities or towns when they are permitted to spend a few hours outside the barracks. The more strict is their military discipline, the more pleasant must seem the city life. Thus they get used to the pleasures of cities. Therefore when they are discharged and return home, they can not forget those pleasures, while they feel a repugnance for their former agricultural life. We are now to see how these observations are borne out by facts.

Theoretically speaking, the best way of demonstrating such observations would be first to get the number of the dis-

[1] Report of the Military Department, March, 1908.

charged soldiers from the country who live in cities and then to establish a comparison between that number and the ordinary people of the corresponding age who have left their homes in the country and removed to the cities. This is, however, impossible for private individuals to accomplish, nor are there any official statistics available for the purpose. We must, therefore, resort to some indirect methods.

Let us admit the assumption that the number of country people who come together in cities or towns runs parallel to that of those who remove their domicile to such places. This assumption seems to be almost an actual fact. This will be seen from statistics for the city of Sasebo, where a rapid increase of inhabitants was accompanied by that of temporary residents, who apply for the registration of their domicile in that city.

Year	Population			Ratio of Nonresidents per 100 Inhabitants
	Residents	Sojourners	Total	
1898	8,750	25,790	34,540	74.7
1899	9,928	28,632	38,560	74.3
1900	10,144	33,679	43,823	76.9
1901	11,408	38,010	49,418	77.0
1902	....	....	50,968	....
1903	12,251	42,878	55,129	77.8
1904	13,923	47,707	61,630	77.4
1905	15,200	55,503	70,703	78.5
1906	15,407	58,756	74,163	79.2
1907	16,121	59,891	76,012	78.7
1908	20,123	58,655	78,778	74.4
1909	22,626	57,641	80,267	71.8
1910	23,872	58,230	82,102	70.9
1911	25,109	61,300	86,409	70.9
1912	26,370	63,983	90,353	69.7

During all these years, the population has increased at the rate of about 15 per cent; the ratio of nonresidents to the inhabitants was rather stationary, that is, between 71 per cent and 79 per cent. This shows that the number of those removing their domicile into the said city accompanies the

increase of nonresidents. Working on this basis, we believe we can say that whenever the number of removals in certain particular classes is large, that of the sojourners of certain particular classes is also large, unless there are some particular circumstances, in which the former wish to move. On the strength of this assumption, we may make the assertion that the discharged soldiers from the country would be relatively more numerous among the sojourners when the number of such soldiers is relatively larger among the men who change their domicile.

Our problem would then be somewhat as follows: Is the number of the said soldiers, who change their domicile to the cities, greater than that of ordinary movers? Here again, we have no direct means of solving the question. The only way is to resort to a certain indirect method. Supposing that the ratio of soldiers enrolled in the active service to the male population is the same in a city and in a district from which the soldiers flow into that city, our formula will be:

$A = \left\{ \begin{matrix} \text{Number of actives} \\ \text{in one city} \end{matrix} \right.$ $A' = \text{Same in the other city.}^1$

$B = \left\{ \begin{matrix} \text{Number of active} \\ \text{reserves or reserves} \end{matrix} \right.$ $B' = \text{“ “ “ “}$

$P = \left\{ \begin{matrix} \text{Number of male} \\ \text{residents} \end{matrix} \right.$ $P' = \text{“ “ “ “}$

(1) In case of the concentration of discharged soldiers in towns—

$$\frac{B}{A} > \frac{B'}{A'}$$

(2) In case this concentration is larger among the said soldiers than among ordinary people—

$$\frac{B}{P} > \frac{B'}{P'}$$

But as the ratio of the actives to the male population is greater in the country than in towns, we must take this circumstance into consideration. Our method of calculation would then become a little more complex.

[1] If necessary, we may in some cases use the actual figures of the active instead of the signs, A, A′.

(1) If there be a concentration of the soldiers in towns, as we have seen above, then there will be such a relation as—

$$\frac{B}{A} > \frac{B'}{A'}$$

And if there be no such concentration, then the question whether its rate is especially great in towns or not is negatived from the outset.

(2) If there obtain such a relation as—

$$\frac{B}{P} > \frac{B'}{P'}$$

in spite of the fact that the rate of the actives to male population is less in towns than in the country, then it goes without saying that the tendency toward concentration is stronger among the discharged soldiers from the country. Even supposing that there obtains no such relation, we can still say that this is the case, if there be the following fact:

$$\frac{B'}{P'} \times \frac{\frac{A}{P} + \left(\frac{A'}{P'} - \frac{A}{P}\right)\frac{1}{m}}{\frac{A'}{P'}} < \frac{B}{P} \left(\text{or } \frac{B'}{P'} < \frac{B}{P} \times \frac{\frac{A'}{P'}}{\frac{A}{P} + \left(\frac{A'}{P'} - \frac{A}{P}\right)\frac{1}{n}} \right)$$

Sign, $\frac{1}{n}$ represents the rate of the total of the removers into the city in question and of the newly born out of them to the whole population, since the enlistment in service of the oldest of the active reserves or of the reserves.

Let us explain the above somewhat in detail. If soldiers flow into cities in the same rate as ordinary people, then the rate of the above two classes of reserves to the male population of cities would be equal to the left side of the formula above. But if $\frac{B}{P}$ is actually greater, then this is an evidence that the reserves are especially numerous. Strictly speaking, the factor B' in $\frac{B'}{P'}$ in the left side must be replaced with $B'+X$, with X indicating the number of soldiers that have gone to the towns. But we may well overlook the X as against the comparatively greater P'. We are now to see

whether or not the rate of concentration is especially great on the part of soldiers, by using the method explained above.

According to statistics prepared in 1910 for the city of Kyoto, the number of soldiers from the country is as follows:

District	Actives			Active Reserves			Reserves			Male Residents
	N. C. O.	Men	Total	N. C. O.	Men	Total	N. C. O.	Men	Total	
Upper.....	23	826	849	74	778	852	212	795	1,007	
Lower.....	29	1,032	1,061	112	1,021	1,133	290	1,059	1,349	
Total ..	52	1,858	1,910	186	1,799	1,985	502	1,854	2,356	167,246

If we wish to know what localities send out the most people to be domiciled in the city, we must ascertain what localities have sent out the most sojourners into the city. According to statistics prepared in 1911, the whole number of sojourners and the localities where sojourners above five thousand were found in the said year, is as follows:

Localities	Number of Sojourners	Per cent of Whole Number of Sójourners
Districts in Kyoto prefecture.....	28,091	17.6
Osaka prefecture.....	11,545	7.2
Hyogo prefecture.....	11,141	7.0
Shiga prefecture.....	37,474	23.4
Gifu prefecture.....	6,122	3.8
Fukui prefecture.....	7,303	4.5
Ishikawa prefecture.....	9,824	6.2
Other districts.....	48,535	20.3
Total	160,035	100.0

For $\frac{B'}{P'}$ and $\frac{A'}{P'}$ in the left side of our formula above, we must find the average that is given by weighing these $\frac{B'}{P'}$ and $\frac{A'}{P'}$ of the different prefectures, according to the respective numbers of sojourners. But we can not, to our regret, secure the accurate figures for $\frac{B'}{P'}$ and $\frac{A'}{P'}$ of all the prefectures above, except those of Shiga, Ishikawa and Hyogo. And we have

found that their figures are very near those of Kyoto, as is evident from the following comparison:

I. Between Kyoto and Ishikawa Prefectures (1907)

	Actives (A)	Male Population (P)	$\frac{A}{P}$
Kyoto	5,184	512,343	.9012
Ishikawa	4,150	411,450	.01009

II. Between Kyoto and Shiga Prefectures (1909)

	Actives (A)	Male Population (P)	$\frac{A}{P}$
Kyoto	6,601	526,358	127.3
Shiga	4,838	381,692	126.7

III. Between Kyoto and Hyogo Prefectures (1909)

	Actives $\left(\frac{A}{n}\right)$	Male Population (P)	$\frac{A}{nP}$
Kyoto	2,189	1,005,211	40.7
Hyogo	4,092	544,363	40.2

It seems that all other prefectures are very similar to the above, and we think we can use $\frac{B'}{P'}$ and $\frac{A'}{P'}$ of Kyoto instead of the average we have obtained above by weighing. It would be more accurate, if we use the $\frac{B'}{P'}$ and $\frac{A'}{P'}$ of the Kyoto districts alone, leaving out that of the city of Kyoto.

Soldiers in the Districts of Kyoto (1910)

Actives			Active Reserves			Reserves			Male Residents
N. C. O.	Men	Total	N. C. O.	Men	Total	N. C. O.	Men	Total	
127	2,435	2,562	169	2,272	2,441	514	2,145	2,659	206,297

According to the above method, the rate of these two reserves to that of the actives $\left(\frac{B}{A}, \frac{B'}{A'}\right)$ is as follows:

	Actives	Active Reserves Against Actives	Reserves Against Actives
City	100%	103.9% $\left(\frac{A}{B}\right)$	123.3% $\left(\frac{B}{A}\right)$
Districts	100%	95.3% $\left(\frac{B'}{A'}\right)$	103.9% $\left(\frac{B'}{A'}\right)$

Either with the active reserves or with the reserves, we find the relation $\frac{B}{A} > \frac{B'}{A'}$. Hence, the certainty of the fact of concentration among the soldiers from the country. Let us see next the ratio of the men of the different services to the male population.

	Actives	Active Reserves	Reserves
City	.0116	.0119	.0141
Districts	.0124	.0118	.0129

Since the rate of the two reserves to the male population is greater in the city than in the districts, their rate is to be greater than that of ordinary people $\left(\frac{B}{P} > \frac{B'}{P'}\right)$.

In order to make the comparison still more accurate, we again use the above formula:

Active Reserve —

$$\frac{B'}{P'} \times \frac{\frac{A}{P} + \left(\frac{A'}{P'} - \frac{A}{P}\right)\frac{1}{n}}{\frac{A'}{P'}} = .0118$$

$$\times \frac{116 + (124 - 116) \times 1/3}{124} = .0118$$

$$\times \frac{116 + 8 \times 1/3}{124} = .0118 \times \frac{116 + \frac{8}{3}}{124} = .0113^{1}$$

But—

$$\frac{B}{P} = .0118 \quad \therefore \frac{B'}{P'} \times \frac{\frac{A}{P} + \left(\frac{A'}{P'} - \frac{A}{P}\right)\frac{1}{n}}{\frac{A'}{P'}} > \frac{B}{P}$$

Reserves —

$$\frac{B}{P} \times \frac{\frac{A}{P} + \left(\frac{A'}{P'} - \frac{A}{P}\right)\frac{1}{n}}{\frac{A'}{P'}} = .0129$$

$$\times \frac{116 + (124 - 116) \times \frac{1}{2}}{124} = .0129 \times \frac{120}{124} = .0125^{2}$$

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[1] Note: $\frac{1}{n} = \frac{1}{3}$. The oldest of the active reserves were enrolled seven years ago, during which the number of the removals into the city has not been more than one third of the male population. Hence, $\frac{1}{3}$.

[2] Note: $\frac{1}{n} = \frac{1}{2}$. The $\frac{1}{2}$ indicates the rate of removals seventeen years hence for the same reason as above. But, $\frac{B}{P} = .0141$

$.0141 > .0125$

We can see from the above that the rate of concentration from the country is greater among the discharged soldiers than among ordinary people. To what extent is this rate due to the effects of military life? In order to answer this question, we must first know whether or not the said soldiers have a stronger tendency toward concentration even without the effects of military life. But we have no material to ascertain it quantitatively.

Let us once more see what is the case with some other great cities, taking $\frac{A'}{P'}$, $\frac{B'}{P'}$ of the district, in which lies the city, instead of the weighted average obtained from the said quantities of the districts wherefrom the soldiers are removed.

CITY OF TOKYO (1910)

	Actives	Active Reserves	Reserves	Male Population
City	5,740	7,237	7,923	619,139
Districts	4,399	5,066	4,799	385,834

	Actives	Active Reserves to One Hundred Actives	Reserves to One Hundred Actives
City	100	126	138
Districts	100	115	109

The above shows that either in the active reserves or in the reserves, $\frac{B}{A}$ is greater than $\frac{B'}{A'}$, from which will be seen the fact of concentration among them.

RATIO TO MALE POPULATION

	Actives	Active Reserves	Reserves
City	.0093	.0117	.0128
Districts	.0114	.0131	.0124

With this alone, we can not ascertain the stronger tendency toward concentration among the said soldiers. Now—

$$\frac{B}{P}=.0117\left|\frac{B'}{P'}\times\frac{\frac{A}{P}+\left(\frac{A'}{P'}-\frac{A}{P}\right)\frac{1}{n}}{\frac{A'}{P'}}\right.=.0131\times\frac{93+(114-93)\frac{1}{3}}{114}$$

$$=131\times\frac{100}{114}=.0115+^{1}$$

$$.0115<.0117\quad\therefore\ \frac{B}{P}>\frac{B'}{P'}\times\frac{\frac{A}{P}+\left(\frac{A'}{P'}-\frac{A}{P}\right)\frac{1}{n}}{\frac{A'}{P'}}$$

We see that the rate of concentration is greater among the active reserves. It is still more evident among the reserves.

$$\frac{B}{P}=.0138\left|\frac{B'}{P'}\times\frac{\frac{A}{P}+\left(\frac{A'}{P'}-\frac{A}{P}\right)\frac{1}{n}}{\frac{A'}{P'}}\right.=.0124$$

$$\times\frac{93+(114-93)\frac{1}{2}}{114}=.0124\times\frac{103.5}{114}=.0123$$

$$.0138>.0123\text{ that is, }\frac{B}{P}>\frac{B'}{P'}\times\frac{\frac{A}{P}+\left(\frac{A'}{P'}-\frac{A}{P}\right)\frac{1}{n}^{2}}{\frac{A}{P}}$$

CITY OF KOBE (1911)

	Actives	Active Reserves	Reserves	Male Population
City	1,224	1,730	1,830	120,648
Districts	10,512	14,330	11,241	878,731

RATIO OF THE TWO RESERVES TO ACTIVES

	Actives	Active Reserves to One Hundred Actives	Reserves to One Hundred Actives
City	100	141	149
Districts	100	137	107

$$\therefore\ \frac{B}{A}>\frac{B'}{A'}$$

RATIO TO MALE POPULATION

	Actives	Active Reserves	Reserves
City	.0101	.0043	.0152
Districts	.0120	.0152	.0128

[1] Note: $\frac{I}{n}=\frac{I}{3}$, according to the circumstances given above.

[2] Note: $\frac{I}{n}=\frac{I}{2}$, according to the circumstances given above.

Active Reserves—

$$\frac{B}{P}=.0143\left|\frac{B'}{P'}\times\frac{\frac{A}{P}+\left(\frac{A}{P}-\frac{A'}{P'}\right)\frac{I}{n}}{\frac{A'}{P'}}\right.=.0127$$

Provided, $\frac{I}{n}=\frac{I}{3}$

Reserves—

$$\frac{B}{P}=.0152\left|\frac{B'}{P'}\times\frac{\frac{A}{P}+\left(\frac{A}{P}-\frac{A'}{P'}\right)\frac{I}{n}}{\frac{A'}{P'}}\right.=.0118$$

Provided, $\frac{I}{n}=\frac{I}{2}$

In either case, the concentration is remarkable among soldiers, especially among the reserves. And this is so in the larger cities. This fact is, however, not so evident in the smaller cities, in some of which the contrary is often the case. Take for example those of the Fukuoka Prefecture:

	Actives			Active Reserves			Reserves			Male Population
	N. C. O.	Men	Total	N. C. O.	Men	Total	N. C. O.	Men	Total	
Fukuoka . .	4	286	290	30	378	408	97	321	418	31,844
Kurume . . .	15	158	173	36	197	233	53	169	222	15,548
Kokura	5	87	92	9	141	150	43	151	194	10,067
Moji	7	109	116	26	129	155	24	118	142	8,811
Total	31	640	671	101	845	946	217	759	976	66,270
Districts . .	451	8,189	8,640	773	11,684	12,457	1,954	11,050	13,004	840,878

Ratio of the Two Reserves to the Actives

	Actives	Active Reserves to 100 Actives	Reserves to 100 Actives
City	100	141	145
Districts	100	144	150

Ratio to Male Population

	Actives	Active Reserves	Reserves
City	.0101	.0141	.0147
Districts	.0104	.0148	.0155

Active Reserves—

$$\frac{B}{P}=.0141\,\frac{B'}{P'}\times\frac{\frac{A}{P}+\left(\frac{A'}{P'}-\frac{A}{P}\right)\frac{I}{n}}{\frac{A'}{P'}}=.0147$$

Reserves—

$$\frac{B}{P} = .0147 \frac{\frac{B'}{P'}}{} \times \frac{\frac{A}{P} + \left(\frac{A'}{P'} - \frac{A}{P}\right)\frac{1}{n}}{\frac{A'}{P'}} = .0153$$

In either case—

$$\frac{B}{P} < \frac{\frac{B'}{P'} \times \frac{A}{P} + \left(\frac{A'}{P'} - \frac{A}{P}\right)\frac{1}{n}}{\frac{A'}{P'}}$$

This may be due to the fact that this prefecture has many small mines in the districts, thereby causing the concentration of discharged soldiers to an extent greater than in other prefectures. But it is also due to the fact that smaller towns have a smaller rate of concentration. The same thing can be said of many other smaller towns.

We have thus far seen that the rate of concentration in towns is greater among the discharged soldiers than among the ordinary people. We believe we are doing justice to the fact when we ascribe it to the effects of military life. Only we are not able to ascertain the extent of the effects, as we can not know the extent of the effects that are caused by some other conditions. The particular local conditions of the places where troops are stationed make a difference in

PREFECTURE OF TOKYO[1]

	Age								
	0–5	5–10	10–15	15–20	20–25	25–30	30–35	35–40	40–45
Men	503.1	462.3	520.1	638.0	564.1	522.4	460.7	370.8	319.6
Women	508.7	447.0	437.5	517.5	543.7	503.4	410.9	317.0	272.1

THROUGHOUT THE COUNTRY

	Age								
	0–5	5–10	10–15	15–20	20–25	25–30	30–35	35–40	40–45
Men	607.2	581.3	525.5	470.4	405.8	401.6	379.0	309.1	294.6
Women	595.9	561.5	516.6	469.5	428.4	407.0	370.1	296.7	274.3

[1] Statistics of population, prepared in 1908.

the effects, of which, however, we have no material to work upon.

Concerning our investigation above, there is one thing that demands our particular attention, and it is whether there is more or less difference between the rate of the age classes of removals of the discharged soldiers and of the ordinary people of a corresponding age. If the rate is greater among the former, then it follows that the rate of concentration among the discharged soldiers is not necessarily great. But our investigation into the actual circumstances shows that the rate of removal is especially great among the people below a corresponding age.

The above statistics do not give the rate of each age among the removals to the city, but the rate of each age for the year previous to it is as follows:

	Age				
	10–15	15–20	20–25	25–30	30–35
Tokyo	112	123	88	93	81
The whole country	91	90	86	99	94

We thus see that the rate of removals into cities is considerable among people ten to twenty years of age. The rate among people ranging from twenty to twenty-five years of age merely make up the difference of death rate; that among people of twenty-five to thirty falls short of the difference; and that among people thirty to thirty-five falls short of the difference to a still greater extent. Our conclusion is therefore not at all affected by such circumstances.

Formation of Military Towns

The places in which troops are stationed have a tendency to form into towns, for they naturally invite commercial and industrial people, especially retailers. If these places have

already been towns, they will undergo a rapid expansion after they become stations for troops. This is because many people flow into them in order to earn their livelihood as suppliers of materials for the troops, or as suppliers of labor and materials both for the troops and the people who are connected with them in various ways.

But it is difficult to estimate the extent of concentration caused by the stationing of troops. This difficulty is twofold. (1) Most of the military stations are located, not in cities or towns, but in their suburbs. Of the seventy-six infantry regiments, thirty-five are stationed in suburbs; of the twenty-four field artillery regiments, twelve; of the twenty-two cavalry regiments, nineteen; of the eighteen engineering battalions, ten; and of the eighteen commissariat battalions, nine are in suburbs. Many of the suppliers mentioned above are naturally led to live in the suburbs, and their number does not appear in the statistics of cities or towns. It is not possible to secure the exact number of the inhabitants of each village around the military stations. The only way left is to obtain the number of the inhabitants of each city or town that lies in the neighborhood of the stations. This is, of course, indirect and insufficient for our purpose. (2) There is another difficulty of a contrary nature. If the statistics of the cities are depended upon, how are we to distinguish between the increase of the city populations caused by the annexation of the neighboring villages and the increase caused by other circumstances? The former is liable to underestimation, while the latter is liable to overestimation. Difficulties such as these lie in our way. Insufficient as our method is, we must pursue our investigation, basing it upon the statistics of the cities.

After the Sino-Japanese War, the number of the divisions was increased from seven to twelve. At the same time, twenty new infantry regiments were organized (the 29th regiment to the 48th regiment). Of these regiments, some were stationed at the places where the divisions had already located while others had to be stationed at new places. As new

divisions are accompanied by new regiments of the infantry and other branches, the increase of divisions means the increase of population to a greater extent than the increase of regiments alone.

Let us now see how this assertion is borne out by the table below. We except from the table Osaka, Kyoto, Nagoya and Sendai, on the one hand, and the two small towns, Muramatsu and Sabaye, on the other, because the former contain more than one hundred thousand inhabitants and accordingly the fluctuation of the figures for inhabitants is caused more by other reasons than by the increase of troops, while the latter are wanting in the statistics of population. The following table,[1] therefore, concerns the fourteen (out of twenty) cities and towns, where regiments were newly organized:

Regiment (Infantry)		Population			
		Towns	1894	1903	Increase
No.	31	Hirosaki[a]	30 934	36,443	5,509
"	32	Yamagata	28 565	40,248	11,683
"	34	Shizuoka	37,824	48,744	10 920
"	35	Kanazawa[a]	89,975	99,657	9,682
"	39	Himeji[a]	31 134	26,509	5,375
"	40	Tottori	27,776	31,023	3,247
"	41	Fukuyama	15,476	16,976	1,500
"	42	Yamaguchi	15,075	19,876	4,801
"	43	Zentsuji[a]	8,083 (1896)	11,044	2,961
"	44	Kochi	37,112	35,518	1,544
"	45	Kagoshima	55,495	59 001	3,506
"	46	Ohmura	7,649 (1898)	7,847	198
"	47	Kokura[a]	18,826	36,825	17,999
"	48	Kurume	26,962	33,273	6,311

[a] New divisions.

The average increase of population throughout the five towns where new divisions were established is about 8,300 (perhaps, the average would be a little more than this, if we were able to include the increase at Zentsuji, since 1894).

[1] The above figures are taken from the *Imperial Statistics*, except those of Zentsuji and Ohmura, which are taken from the *Prefectural Statistics*.

The average in those towns where regiments alone were newly organized is 4,550.

The difference must be regarded as due to such special branches as cavalry, artillery, engineering, etc.

Thus, new troops mean an increase of population in certain towns. But what relation is there between this increase and the size of the towns? It is difficult to give an accurate answer with the scanty data at hand. But, examination of this material reveals that the smaller the town, the larger the increase of population that is due to the new organization of troops. Of the towns in the above table, the increase in the towns of ten thousand to twenty thousand inhabitants, in the towns of twenty thousand to thirty thousand, and in the towns of thirty thousand to forty thousand, is as follows:

Size of Towns	Number of Towns	Total Population (1894)	Total Population (1903)	Increase	Average
(A) 10,000[a]–20,000	3	49,377	73,677	24,300	8,100
(B) 20,000 –30,000	3	83,303	104,544	21,241	7,080
(C) 30,000 –40,000	4	137,004	157,214	20,210	5,050

[a] One of (A) is the place where a division is stationed, and two of (C) have each a division.

The above figures show that the smaller the size of the towns, the larger the increase in the population. Let us next see how this is the case with the towns of the three following classes,—those above ten thousand, those above twenty thousand and those above thirty thousand but below forty thousand, the number of each, according to statistics prepared in 1894. The increase of the population of each up to 1903 is as follows:

Size of Towns	Number of Towns	Total Population (1894)	Total Population (1904)	Increase	Average
(A) 10,000–20,000.	43	1,473,512	1,596,694	123,182	2,865
(B) 20,000–30,000.	11	304,392	373,255	68,863	6,260
(C) 30,000–40,000.	19	....	....	96,805	5,095

Comparing the average of each town with that of the same in the other table, we find that the increase caused by new troops is greater in the smaller towns.

Towns	Average of the Places for new Troops	Increase of Average Total	Comparison
A	8,100	2,865	5,235
B	7,080	6,260	820
C	5,050	5,095	45

That the increase of population is greater in the places where new divisions are established than in the places where new regiments are organized, and that the increase of population caused by new troops is especially large in the smaller towns, can be seen by looking at the places where new troops were stationed after the Russo-Japanese War. Twenty-four regiments were newly established after the war. Below is a comparison between the population before the establishment and that after the establishment in the places where regiments are stationed, excepting Hiroshima and other cities containing a population above one hundred thousand, and Sasayama and Sakura, whose population we have no means of ascertaining:

Regiment	Towns	1903	1908	Increase
No. 49	Kofu	44,188	49,882	5,694
" 50	Matsumoto	33,493	35,011	1,518
" 51	Tsu	36,408	41,229	4,821
" 52	Hirosaki	36,443	37,489	1,046
" 53	Nara	33,735	32,732	1,003
" 54	Okayama[a]	81,025	93,421	12,396
" 55	Saga	35,083	36,051	968
" 56	Kurume[a]	33,273	35,928	2,655
" 58	Takata[a]	19,557	28,021	8,464
" 59 and 66	Utsunomiya[a]	35,953	45,183	9,230
" 60	Toyohashi[a]	28,315	43,980	15,655
" 61	Wakayama	68,527	77,303	8,776
" 62	Tokushima	63,710	65,561	1,851
" 63	Matsuye	35,081	36,209	1,128
" 64	Miyakonojo	14,716	18,345	3,629
" 65	Wakamatsu	32,534	39,265	6,731
" 67	Hamamatsu	23,306	32,381	9,075
" 68	Gifu	40,168	41,488	1,320
" 69	Toyama	56,275	57,437	1,162
" 72	Oita	11,927	29,547	17,620

[a] Towns where new divisions were established. Besides these, Kyoto had a new division. But its population is too large for our purpose, so it is omitted from the table. All the above figures are based upon statistics.

Let us again compare the increase of population in the places where new divisions were formed with that in the places where new regiments were organized.

	Number of Towns	1903	1908	Increase	Average
Places of new divisions. . .	5	198,123	246,533	48,410	9,682
Places of new regiments. . .	15	565,594	629,928	64,334	4,289

Of these two classes of towns, the increase in the former is twice as large as that in the latter. We shall now find that the smaller towns have greater increase of population by the stationing of new troops when we look at the population of each of the above classes of towns:

(1) Increase Throughout Towns, Garrisoned by New Divisions

Size of Towns	Number of Towns	Population 1903	Population 1908	Increase	Average
10,000–25,000	5	69,506	152,274	82,668	16,533
25,000–50,000	12	429,674	474,345	44,571	3,631[a]

[a] It must be remembered that such an increase is due not only to new troops but also to other circumstances.

(2) Increase in Towns, Not Garrisoned by New Divisions

Size of Towns	Number of Towns	Population 1903	Population 1908	Increase	Average
10,000–25,000	3	49,949	80,273	30,324	10,108
25,000–50,000	9	327,133	349,354	22,221	2,525

The increase in the smaller towns of 10,000 to 25,000 during this period has been—

Number of Towns	Population 1903	Population 1908	Increase	Average
103	1,581,109	1,719,061	137,952	1,281

Therefore it follows that however small the average increase of the larger towns of 25,000 to 50,000 may be, the increase caused by new troops is greater in the towns below 25,000.

Now for the reasons why the increase is larger in the smaller towns. Some of the new trades demanded by the establishment of new troops are not found in the smaller towns. Even if found, men of those trades are few. Hence, the necessity of concentration, in order to meet the new demand. The larger towns have such trades already even before the establishment, and the number of men engaged in the trades is large. However, they have to extend their businesses by greater effort. Hence, the lesser increase of population in the larger towns. Of course, a new event such as the establishment of new troops may cause a boom among the traders, which will in turn attract people from other quarters. But such a psychological circumstance fails computation.

Our statistical investigations have shown that the towns for new divisions have greater increase of population than the towns for new regiments, that the increase of population is caused by the establishment of troops, and that the increase is greater in the smaller towns than in the larger towns. But the results arrived at are only of a general nature. For those towns are mostly provincial centers of commerce, education, local administration, etc., and have other and more varied causes for the increase of population than the establishment of troops. In order to obtain more accurate results, we should have to take a place where there was no cause for the increase other than the establishment of new divisions or regiments. But such places can not be found. The town of Zentsuji, however, approaches this ideal, which we shall now consider.

Previous to the establishment of a new division, this town had consisted of a smaller town, containing some three thousand inhabitants, and an agricultural village, containing some five thousand inhabitants. There were scarcely any circumstances that would attract people except the establishment of new troops. But it has now developed into a town of more than 14,000 inhabitants, including the surrounding villages. The following statistics show the process of its growth:

POPULATION OF ZENTSUJI

Year	Town of Zentsuji	Number of Houses	Inhabitants		
			Men	Women	Total
1896	Village Yoshida	410	....	....	2,294
	" Zentsuji	654	....	....	3,058
	" Asano	555	....	....	2,731
	Total	1,619	....	....	8,083
1898	Village Yoshida	558	1,427	1,335	2,762
	" Zentsuji	932	1,947	1,972	3,918
	" Asano	607	1,423	1,426	2,849
	Total	2,097	4,797	4,732	9,529
1899	Village Yoshida	....	1,458	1,599	3,057
	" Zentsuji	....	2,342	2,321	4,663
	" Asano	....	1,398	1,390	2,788
	Total	....	5,198	5,310	10,508
1901		2,344	6,780	4,952	11,732
1902		3,199	7,502	5,122	12,624
1903		2,385	5,616	5,428	11,044
1904		3,422	7,019	5,244	12,263
1905		2,542	7,237	6,561	13,798
1906		2,627	7,563	6,642	14,205
1907		2,704	7,645	6,786	14,431
1908		3,806	7,273	7,348	14,621
1909[a]		....	....	....	....
1910[a]		....	....	....	....
1911		....	7,036	7,072	14,108
1912		3,684	....	....	14,363

[a] No statistics for 1909 and 1910.

Let us next see the fluctuation of the figures in the neighboring towns and villages, where no division was established, in order to estimate the speed of increase.

POPULATION OF NEIGHBORING TOWNS AND VILLAGES

Places	1897	1899	1902	1905	1908	1911
A (Tadotsu)	7,763	7,979	7,483	7,715	7,863	8,572
B (Toyohara)	2,944	2,938	3,402	2,904	2,826	3,030
C (Shirakata)	2,757	2,823	2,492	3,036	2,974	2,967
D (Shikamura)	3,396	3,356	3,529	3,578	3,537	3,723
E (Yoshiwara)	2,494	2,476	2,561	2,517	2,568	2,677
F (Fudeoka)	2,512	2,601	2,808	2,849	3,034	2,870
Total	21,866	22,173	22,275	22,599	22,802	23,939

RATIO OF INCREASE IN NEIGHBORING TOWNS AND VILLAGES

Year	Villages (excluding A)		Towns and Villages (including A)	
	Population	Ratio of Increase	Population	Ratio of Increase
1897	14,103	100	21,866	100
1899	14,194	100.7	22,173	101.4
1902	14,792	104.9	22,275	101.9
1905	14,884	105.6	22,599	103.3
1908	14,939	106	22,802	104.2
1911	15,367	109	23,939	109.5

RATIO OF INCREASE IN ZENTSUJI

Year	Villages		Towns and Villages	
	Estimated Increase[a]	Actual Excess over Estimate	Estimated Increase[a]	Actual Excess over Estimate
1897	8,083[b]	....	....	....
1899	8,140	8,196	2,368	2,311
1902	8,479	8,237	3,695	3,937
1905	8,536	8,350	5,262	5,448
1908	8,568	8,423	6,053	6,198
1911	8,811	8,851	5,397	5,257

[a] Estimated on supposition that ratio of increase is same as of neighboring towns and villages.
[b] The figures are for 1896. We have no rate for 1897.

From the above it will be seen that the increase of population caused by the establishment of a new division is about five thousand and a fraction. Moreover, the towns in which divisions are stationed are usually places where are stationed not only infantry regiments, but also regiments, battalions, corps, etc., of other special branches, and hospitals, armories and regimental and divisional headquarters. The full force of an infantry regiment is about eighteen hundred, while that of two regiments and battalions of other special branches is never more than nineteen hundred and fifty. But there are other men belonging to special offices and bureaus. Taking all this into consideration, it would be probably correct to

state that the increase of population, at the towns where new divisions are established, is about one-third of the above number, that is, sixteen or seventeen hundred. Again, changes in the list of soldiers would make a difference. If the establishment of new divisions should take place in larger towns, the rate of the increase of population would be still less.

Summary

As we have seen above, the system of conscription tends to attract soldiers to cities, and, as a consequence, to attract civilians to these places where troops are stationed. We may therefore say that the system is an effective factor in encouraging concentration in towns. However, concentration is also encouraged in other ways. The manufacture of military materials and the business of supplying raw materials for this manufacture, even in towns where troops are not stationed, causes concentration. Then, again, increase in population is often the result of the construction of improved means of communication and of sanitary equipments for the convenience of the troops. These circumstances must of course not be overlooked, even though we have not the means at hand to study them in definite quantities.

CHAPTER IV

EFFECTS ON EMPLOYMENT

The following four chapters will be devoted to an investigation of the effects of the system of conscription upon national economy. Our investigation falls under two general headings—the effects upon production and the effects upon consumption.

Let us first study the economic effects upon production. That capital and labor must be united in order to carry out production is undeniable. In other words, employment and labor must go hand in hand. Other things being equal, the productive power of a nation is determined by the quantity of labor plus employment. If we wish to determine the effects of the system of conscription upon the productive power of our nation, we have first to note its effects upon employment, then its effects upon labor, and lastly its effects upon the combination of the two. Loss of labor is usually pointed out as the effect of this system. But how this is so can be known only when the question whether there is enough opportunity for employment is answered. In this chapter, we shall observe the effects upon employment, dividing it into two sections, that concerning agriculture and that concerning manufactures and commerce.

Agriculture

The effects of the system upon agricultural employments can not be said to be great. They are little compared with those upon commerce and manufactures. The agricultural effects are to be seen from two aspects—that of the increase of employments, and that of their decrease.

Decrease of Agricultural Employments

The chief cause of the decrease is to be found in the decrease of the area of arable land, owing to the larger area

being used for military purposes. As the selection of the sites for barracks is determined by the conditions that are convenient for military purposes, such as defense or mobilization, the ground in the neighborhood of cities or towns is liable to utilization. And such ground is usually fertile soil. Of course, the decrease of the area from such a cause is not very considerable, and yet not so little as to justify overlooking it. We can not know the exact amount of such decrease, but we can obtain an approximate estimate of the arable area utilized by the Military Department when we sum up the areal amounts of those lots whose estimated values are above ten *sen* per *tsubo* (thirty *yen* per acre). The following figures are based on the "Annual Report" prepared by the department on December 31, 1910:

ARABLE LAND USED FOR MILITARY PURPOSES

Offices	Area	Land Value per *Tsubo*
	Tsubo	*Sen*
The Land Survey Dept.	242	13.3– 61.3
Headquarters of Special Military Works.	3,856,932	15.6– 143.0
Headquarters of Fortifications.	5,993,675	10.4– 28.6
The Tokyo Arsenal.	768,212	100.0– 854.5
The Osaka Arsenal.	569 547	156.1–1200.4
The Senju Woolen Factory.	32,358	1300.0
The Horse Administration Bureau.	643,555	17.7– 19.6
The Imperial Guard Division.	1,008,092	33.3– 348.5
The First Division.	9,505,228	19.8– 478.7
The Second " .	5,942	100.0
The Third " .	3,884,731	12.4– 313.1
The Fourth " .	2,333,580	100.0– 598.9
The Fifth " .	1,903,070	22.1– 119.1
The Sixth " .	6,032,110	22.5– 150.0
The Seventh " .	0	0
The Eighth " .	457,064	24.9
The Ninth " .	2,108,566	25.5
The Tenth " .	4,725,054	16.9
The Eleventh " .	2,709,864	10.8– 122.7
The Twelfth " .	1,297,140	84.3– 115.0
The Thirteenth " .	1,131,219	28.6
The Fourteenth " .	858,139	36.5
The Fifteenth " .	7,526,973	24.7
The Sixteenth " .	863,361	23.6– 146.6
The Seventeenth " .	10,362,452	13.2– 78.4
The Eighteenth " .	836,702	57.5– 234.8
Total.	72,868,770	

According to another statistical report prepared by the department in the same year (1910), the total area under its control is 765,230,891 *tsubo*. Deducting from the total the area in Korea, Formosa, Manchuria and that under the control of the headquarters of special military works but lying outside the country, we get 729,513,004 *tsubo*, which is the total area within the country. Of this total area within the country, nearly one-tenth is supposed to be arable land. Hence, we must say that the decrease of the arable area means the decrease of agricultural employment. If there be any objection to the method that regards the land value of thirty *yen* up per *tan* (=$\frac{1}{4}$ acre) as a mark of arable land, let us then exchange this estimate for that of one hundred *yen*. Now, according to the statistical report above, there are 22,493,313 *tsubo* of such land. To the extent that this much of the arable land is turned into military use, agricultural laborers are deprived of their employment. In 1912 and 1913, a fraction of the land under the control of the department was sold, but we have no means of knowing just how much.

Increase of Agricultural Employments

Troops are better provided with food and clothing than the people at large, which we shall see later. For the supply of raw materials we have to depend upon primitive industry. The better the conditions of living of the troops, the more we depend upon it. Most of the cotton and wool for military use comes from foreign lands, but rice and other grains, vegetables, fish and meat and leathers are obtained at home. The fact that these materials, especially those of better qualities, are in large demand in the army must be one of the sources of the livelihood of agricultural and fishing laborers. We must put this matter aside for the time being, because the investigation into such a matter is accompanied by too intricate conditions, and because the extent of its being a source of their livelihood is not so considerable. We say not con-

siderable, since such necessaries as specified above would be in demand among the masses, if their prices were reduced a little.

Troops cause an increase of agricultural, especially stock farming, employments from circumstances other than those mentioned above. They demand war horses and forage. Industry connected with war horses and forage is possible only because of troops. We can not, of course, obtain any definite estimate of the increase of employments in the production of war horses. But there is no doubt that industrial laborers derive more benefit and more employment than if there were no demand for war horses. And we can estimate the extent of the demand for war horses and forage.

In order to know how troops are supplied with horses, let us see what are some of the provisions made in the Horse Administration Regulations (Military Department, No. 69, issued in 1908).

All corps (except the Horse Supply Bureau and those corps whose horses are supplied out of the surplus horses of military schools) shall fill up their number of horses every year, at the rate of one-tenth of the prescribed number. (Chapter 2, clause 4.)

The following horses are to be supplied with those bred at the Horse Supply Bureau,—cavalry horses, field artillery horses, horses belonging to the cavalry training school and those belonging to the field artillery training school, and which are to be supplemented periodically. (Chapter 2, clause 5.)

The following horses are to be replaced with young horses purchased: mountain artillery horses, heavy artillery horses, commissariat horses, telegraphic battalion horses, those used by the different schools, those used by officers, those to be provided for the first time and those to be supplied temporarily. (Chapter 2, clause 6.)

The Horse Supply Bureau shall purchase every year two-year-old horses to the number of one-third of the horses that are being bred at the bureau, and to train them for about three years. The horses to be purchased may be three years old if necessary. (Chapter 3, clause 14.)

The average number of horses per day, in 1910, is as follows:

Division	1910	1911	1912
Schools	1,912	1,984	1,992
1st Division	5 011	5,061	5,062
Imperial Guards	3 439	3,472	3,468
2d Division	790	623	1,298
3d "	1 141	1,138	1,123
4th "	1,401	1,406	1,420
5th "	1,388	956	762
6th "	901	1,147	1,165
7th "	1,145	1,156	1,165
8th "	2,483	2,495	2,016
9th "	1,134	1,138	1,150
10th "	1,137	1,139	1,156
11th "	478	1,259	1,153
12th "	1,656	1,703	1,723
13th "	1,139	1,158	1,174
14th "	1,156	1,165	1,192
15th "	2,465	2,478	2,496
16th "	1,134	1,139	1,163
17th "	1 247	1,293	316
18th "	1 254	1,287	1,273
Troops in Korea	1 917	1 522	1,480
Troops in Formosa	150	148	156
Troops in China and Manchuria	1,036	1,773	1,223
The Branch Office of Horse Supply Bureau at Shirakawa	1,470	1,429	1 341
The Branch Office at Hagino	949	1,135	1 094
" " " " Kushiro	689	698	764
" " " " Takanabe	928	941	939
" " " " Kawakami	497	512	549
" " " " Sanbongi	1 355	1,404	1 433
" " " " Muhara	898	873	861
" " " " Shichinohel	144	1,193	1,266
" " " " Oyama	636	672	683
Total	44,080	45 397	44,025

One-third of this total, that is, some three thousand head, is to be replaced every year with a fresh supply, purchased by the Horse Supply Bureau. The different military schools need also an annual fresh supply of horses to the extent of one-tenth of the prescribed bed number. One-seventh of the total number of war horses has to be supplied annually, according to our calculation based on the "regulations." We find the same situation with the number of the head actually filled up.

1912 Number of Years Horses Were Used	Horses
0– 1	197× 1= 197
1– 2	224× 2= 448
2– 3	293× 3= 879
3– 4	248× 4= 992
4– 5	273× 5=1,365
5– 6	216× 6=1,296
6– 7	447× 7=3,129
7– 8	819× 8=6,552
8– 9	614× 9=5,526
9–10	117×10=1,170
10–11	255×11=3,905
11–12	26×12= 312
12–13	30×13= 390
13–14	16×14= 224
14–15	11×15= 165
15–16	6×16= 96
16–	6×17= 102
	3,898 26,748

26,748÷3,898=6.87

1910 Number of Years Horses Were Used	Horses
0– 1	294× 1= 294
1– 2	299× 2= 598
2– 3	452× 3=1,356
3– 4	209× 4= 836
4– 5	473× 5=2,365
5– 6	888× 6=5,328
6– 7	711× 7=4,977
7– 8	156× 8=1,248
8– 9	142× 9=1,278
9–10	151×10=1,510
10–11	285×11=3,135
11–12	24×12= 286
12–13	18×13= 234
13–14	9×14= 126
14–15	14×15= 210
15–16	7×16= 112
16–	6×17= 102
	4,140 23,997

23,997÷4,140=5.80

Thus the number of years during which horses are employed is about six or seven years, which shows that about one-seventh of the horses in employment is to be filled up every year. The following figures indicate the number of horses purchased in recent years:

Years	Kinds	Head	Total Cost	Average Amount Per Head
			Yen	*Yen*
1910	Riding horses	4,272	598,161	140.00
	Cart horses	1,780	256,026	143.83
	Pack horses	513	59,992	116.44
	Total	6,565	914,179	139.25
1911	Riding horses	3,194	453,529	141.994
	Cart horses	1,488	201,362	135.324
	Pack horses	300	36,422	121.407
	Total	4,982	691,312	138.762
1912	Riding horses	2,911	407,371	139.942
	Cart horses	1,158	156,133	134.830
	Pack horses	308	36,497	118.497
	Total	4,377	600,001	137.081

It is further provided in the Officers' Horse Riding Regulations (Imperial Ordinance, No. 4) issued in January, 1907, that officers above field officers must keep a certain number of their own. For the first provision and for supplementing them thereafter they must purchase them from the people. The number of such officers is about two thousand, and their horses number at least twenty-five hundred. Of this number of horses, one-sixth or more than four hundred, is to be supplied anew every year. Altogether, the stock farmers have to supply the army with at least five thousand head per year.

The amount of money that is paid per horse is seven thousand *yen*, roughly estimated, all of which goes into the hands of stock farmers.

In its effect upon the live stock considered as a whole, this demand for war horses is, however, not very great. The total number of horses in this country is more than 1,500,000, and the number annually produced is about 120,000.

	Horses	Number of Horses Produced
1910	1,564,643	117,950
1909	1,551,156	116,380
1908	1,494,506	107,847
1907	1,465,466	107,072

Considered quantitatively, the number of fifty thousand is not very large when compared with the figures above. But we must not overlook the effect of war horses upon the improvement of live stock. In time of war, a much greater number of war horses is demanded. And the effects of a war upon the quality of horses are important. The number of horses requisitioned during the Russo-Japanese War was more than 150,000.

Years	1902	1903	1904	1905	1906
Horses	1,515,108	1,523,745	1,390,017	1,367,615	1,465,466

The military authorities are doing their best for the improvement of war horses, and the effects upon horse industry will be great.

The increase of agricultural employment is also caused by

the demand for forage, which is supplied by the Horse Supply Bureau and by the agricultural people at large. It is provided in the regulations that all the horses belonging to the bureau are to be fed with forage raised on its own fields, though it may be purchased in the common markets in some special cases.[1] The cultivation work of the Military Horse Supplement Department shall be planned according to the required amount after harvest to be estimated by the number of trained horses and of other horses.[2] We shall not be far from correct, when we assume that the fodder of the said department is obtained by its harvest. The following figures will give some idea of the farming work of this bureau:

Year	Cultivated Fields	New Fields	Yield	
	Cho	*Cho*	*Koku*	*Kan*
1903	3143.92	1256.41	26.711	3,298.612
1906	4229.45	353.43	48.276	3,335.626
1907	3830.00	100.30	35.777	3,950.144

Cho=2.45 acres. *Koku*=five bushels, short. *Kan*=8.28 lbs.

We have no information yet about the area and yield after 1907. Now, the average number of war horses per day was 33,000 head in 1907. After 1910 this average was increased to the extent of one-third of this figure. We may well suppose that the Horse Supply Bureau increased its horses to the same extent. The area of the fields would then be about five thousand *cho*.

As to the thirty-five or six thousand heads not belonging to the bureau, and two thousand and odd belonging to officers above field officers, their forage is all supplied by the common people.

The following is an estimate of the forage demanded of them, basing it upon a table in the "Horse Allowance Regulations."[3]

[1] Military Horse Management Regulations, No. 17.
[2] *Ibid.*, No. 16.
[3] According to the regulations, the allowance of straw may be increased to an extent not exceeding .400 in cold regions. Oats may be used instead of barley, and hay instead of forage, at the rate of .900 of oats to 1.000 of barley and of .800 of hay to 1.000 of forage.

Class of Horses	Horse Allowance per Day			Increased Allowance of a Horse per Day
	Barley	Forage	Straw	Barley
	Kan	*Kan*	*Kan*	*Kan*
First class	1.400	1.000	1.000	
Second "	1.300	"	"	Not more than .350
Third "	1.000	"	"	
Fourth "	1.000	"	"	

From the above table, it will be seen that the average of barley is about 1.200. Setting aside the increase allowance, let us see the amount of horse allowance for some thirty-eight thousand head of horses.

Kind of Feed	Horse Allowance per Day	Horse Allowance per Year	Horses	Total Allowance per Year
	Kan	*Kan*	*Head*	*Kan*
Barley	1.200	438.000	38,000	16,724,000
Straw	1.000	365.000	38,000	13,870,000
Forage	1.000	365.000	38,000	13,870,000

One-sixth of the barley is replaced with oats. As the oats raised in Hokkaido have no other use than for feeding horses, the whole amount is turned to military uses. Barley is somewhat above oats in price, but regarding both as of the same price, for the sake of convenience, we find one hundred *kan* of barley is worth about seventeen *yen* (including carriage). The yearly amount is then worth about 2,800,000 *yen*. We must not forget that the horses belonging to officers are fed with a better grade and a greater quantity of barley.

Barley is purchased, as in the case of cleaned rice and wheat, by means of written bids, the required amount being delivered by the successful bidder at the respective corps. The amount of oats to be purchased in Hokkaido is about 1,000 *kan*, which is apportioned to the several villages beforehand, and each village has to bring its yield to the Provision Department. In 1914, there were fifty-five such villages and two farms,

the apportioned amount of each ranging from 15,000 to 850,000 *kan*. Straw is purchased in the same manner. In the fiscal year 1913, the amount of straw purchased by a certain division from two bidders was as follows, the amount being divided into four lots:

	Quantities	Unit Price (100 *Kan*)
	Kan	*Yen*
A certain	120,000	3.30
K	120,000	3.80
A certain	200,000	2.40
M	180,000	1.79
Total	620,000	

Hay is usually purchased directly from farms, not through intermediary merchants. In some cases it is purchased from the industrial guilds under the village agricultural association, or from the village officer representing a certain number of farmers. In the fiscal year of 1914, 1,500,000 *kan* of hay was apportioned to the several agencies in Hokkaido, as follows:

Sent in by	Quantity
O	400,000
K	40,000
A	20,000
K An industrial guild	300,000
M	75,000
N	25,000
S { A representative of the district	60,140
H	20,000

Sent in by	Quantity
R { A village agricultural association	41,741
M	35,000
S { An industrial guild of a town	8,000
T	80,000
S { A village agricultural association	240,120
H	100,000
T { A village agricultural association	30,000
A	250,000

As we shall see later, the value of the above hay is about 1,500,000 *yen*, 400,000 *yen* of which was for straw.

From the above it follows that agricultural employments are both increased and decreased as an effect of the military system. A rough estimate of the extent of increase is as follows:

	Yen
Barley and oats	2,800,000
Straw	400,000
Hay	1,100,000
Horses	700,000
Total	5,000,000

As efforts are made not to deal through intermediary merchants in the purchase of forage, it may be supposed that almost the whole amount of money paid out goes directly into the hands of the agricultural and stock farming people. Supposing the cost of production to be half of the amount, that is, 2,500,000 *yen*, the other half will be net profit. If three hundred is sufficient to support a laborer's family, then the amount of 2,500,000 *yen* will be able to support 7,500 such families. Such is the extent of the increase of employment. It has been seen that the decrease of the area of arable land is 22,493,313 *tsubo*, which is equal to 7,500 *cho*. As the average area of arable land per family is about one *cho*, the said decrease means the decrease of the employment for 7,500 families. The increase of employment caused by the conscription system, disregarding the employments connected with the Horse Supply Bureau, is only sufficient to balance the decrease.

Manufacture and Commerce

The system of conscription no doubt exercises considerable effect upon commercial and manufacturing employment. The exact extent of these effects is, however, more difficult to ascertain than in the case of agriculture.

Let us begin with the effects upon commerce. We find an increase of employment on various sides. Most of the soldiers come from farmers' homes, which are self-supporting. But once enlisted in service, all their needs must be met through merchants. Moreover, they are better supplied at the barracks than at home, and this makes for the increase of employment on the part of merchants. Not only that, but the demands peculiar to military life give a wider field of

activity to merchants. All this means an increase in commercial employment. But we do not know the exact extent of the increase, and we must be satisfied with a rough estimate. We may be sure that the extent of the increase will presumably not exceed our estimate.

The following are the various merchants who get their livelihood from troops:

(1) Those dealing in goods that go to the Provision Bureau, that is, those engaged in the production of canned food and in the transportation of raw materials necessary for such production.

(2) Those dealing in goods demanded by the arsenals, that is, dealers in metals, leathers, timbers, raw materials for gunpowder and other articles.

(3) Those dealing in goods demanded by the Senju Woolen Factory and the Clothing Department, *i.e.*, dealers in furs, hides, leathers, dyestuffs, cotton, etc.

(4) Those dealing in goods demanded by the Divisional Accountants' Bureau, *i.e.*, dealers in cleaned rice and wheat, forage, underwear, stockings, such articles as are necessary for repairing clothing, etc. Those goods in demand at the Divisional Headquarters are not included in these.

(5) Those dealing in goods in demand by the different bodies of troops, *i.e.*, dealers in provisions and materials for cooking (vegetables, meat, fish, grains, sugar, fuel, etc.), articles for consumption in barracks (desk, chairs, clocks, stationery, tents, brooms, etc.), such articles as are necessary for the repair of arms (cotton, grease, paper, etc.), sundries used in military exercises, etc.

(6) Camp hawkers. Dealers in articles necessary to the individual soldier, such as stationery, beverages, comestibles, etc.

(7) Dealers in articles disposed of by the troops, such as empty bales and bottles, old clothing, etc.

(8) Those engaged in such businesses as restaurants, theatres, baths, bars, fruit stores, confectioneries, the sale of daily necessaries such as handkerchiefs, towels, tooth powder, soap, stationery, the sale of souvenirs and noted local products.

(9) Hotel keepers accommodating visitors to the barracks.

(10) Dealers in articles in demand by the soldiers living outside barracks, and their families, such as daily necessaries, furniture, luxuries, etc.

The enumeration above is nearly complete, so far as the leading goods and articles are concerned.

It is possible for us to make an estimate of the amount of money that is expended for some of them. Let us now make an investigation into this amount of money and the classes to which the merchants concerned belong.

The total amount for barley and oats used as forage is about 2,800,000 *yen*, as we have already seen. Each of the divisions that has no cavalry attached to it needs annually barley and oats valued at 100,000 to 120,000 *yen*. The total amount for hay is about 1,100,000 *yen*, of which 40,000 to 50,000 *yen* is paid by each division. The total amount for straw is about 400,000 *yen*, of which 15,000 to 20,000 is paid by each division. These estimates include transportation charges.

Barley and straw are purchased through merchants of smaller means, who collect them from among the farmers, while hay, and oats, raised in Hokkaido, are purchased directly from the producers.

The amounts of raw materials that are sent in to the arsenals are as follows:

	1910		1911	
	Tokyo Arsenal	Osaka Arsenal	Tokyo Arsenal	Osaka Arsenal
	Yen	*Yen*	*Yen*	*Yen*
Metals	1,174,800	2,216,430	1,365,119	1,962,649
Leathers	1,243,242	1,107,017	1,233,566	183,840
Timbers	966,333	603,560	967,708	812,057
Gunpowder materials	448,147	745,803	1,067,196	570,875
Sundries	663,107	516,760	875,8c8	670,057
Totals	9,685,199 *Yen*		9,708,875 *Yen*	

Goods Furnished the Clothing Department, Including Those to the Senju Woolen Factory, 1913

(1) Raw materials and their values:
  (*a*) Those obtainable at home—wool oil, leather oil, raw materials for gloves and socks, dyestuffs (acetic acid, indigo, ammonia, sulphuric acid, etc.), and coal. The values of all these goods amount to 46,246 *yen*.
  (*b*) Those imported—wool oil, leather oil, wool, dyestuffs, grease, etc., the values of which amount to 1,427,738 *yen*.
(2) Manufactured goods and their values:
  (*a*) Those obtainable at home—light brown woolen cloth, cloth for gaiters, cloth for badges, woolen thread for knitting, thick weave cotton, spun cotton, calicoes, various sorts of hemp cloth, leathers, belts, sewing threads, ammonia, sulphuric acid, cocoanut resin, oils, cement, bricks, accessories to apparatus and machines, etc. The values amount to 4,307,082 *yen*.
  (*b*) Those imported—woolen threads, furs, nails and threads for shoes, pegs, hemp cloth, oleate oils, olivine oils, accessories to machines, leather made articles, etc. The values amount to 194,002 *yen*.

The total value of goods that are purchased by the Clothing Department is 5,995,068 *yen*.

Goods Furnished the Provision Bureau, 1913

(1) Raw materials:
  (*a*) Those obtainable at home—meat, flour, sugar, soy, salt, sweet sake, potatoes, seasame, pickles, firboards, coal, etc., amounted to 885,597 *yen*.
  (*b*) Those imported—tin, hops, lead, raw gum, varnish, ammonia for cold storage, shellac, etc., amounted to 16,922 *yen*.
(2) Manufactured goods:
  (*a*) Those obtainable at home—powdered salt, solid salt,

paper bags, wooden boxes, ropes, cotton thread, straw bags, etc., amounted to 133,418 *yen*.

(*b*) Those imported—nails, tin-plates, etc., amounted to 111,957 *yen*.

The total amount of goods that are purchased by the Provision Bureau is 1,147,894 *yen*.

We have seen the amount of goods that are purchased by the two arsenals, the Clothing Department, and the Provision Bureau, and also their value. Roughly estimated, the whole amount of the purchases by the Military Department is more than 16,000,000 *yen*. All these purchases are made on large scales by means of written bids. Merchants of smaller means can, therefore, not engage in such business. The Senju Woolen Factory purchased wool, in 1913, to the quantity and value of to 3,451,236 pounds and 1,566,759 *yen*. Except 19,200 pounds (value 7,653 *yen*) of this wool, supplied by the Imperial Farm at Shimosa, the Matsukata Farm at Nasuno at Tochigi Prefecture, and the Koiwai Farm at Iwate Prefecture, all of it was imported from Australia and South America by such great companies as the Okura Gumi, the Mitsui Bussan and the Iida Co. (The Osaka Mainichi, December 25, 1913.) Below is a table of the purchases by the Senju Woolen Factory:

	1910	1911
	Yen	*Yen*
Furs and woolen yarn	1,412,021	1,475,251
Dyestuffs	15,242	86,571
Hides	....	2,170
Total	1,427,263	1,563,992[a]

[a] The purchase made by the Clothing Department in the two years above is not published.

The same is true for the two commodities of rice and wheat. Only wealthy merchants reap the benefits. The rice purchased by the Accountants' Bureau is worth about twenty-two *yen* per *koku* (about five bushels), and the amount paid by the bureau is 7,500,000 *yen*. Each of the divisions purchases cleaned rice to the amount of about 350,000 *yen*. The price of cleaned wheat is about eleven *yen* per *koku*. The

Accountants' Bureau pays about 1,500,000 *yen* for the wheat, while each division pays about eighty thousand *yen*.

In the case of cleaned rice, the purchase is made by means of written bids on units of two hundred *koku*, which is the quantity required at each division for two months. The purchase of cleaned wheat is made by means of written bids, on units of one hundred *koku*, which is the quantity required at each division for two months. Such being the case, merchants of smaller means are not able to handle the business.

It is carried on by a few wealthy merchants, some of whom supply the required quantities to several divisions. According to our law, any merchant may engage in a business like this, if he has been engaged in it for at least two years and is furnished with a certificate issued by the village officials. But, as a result of competition, wealthy merchants have come to monopolize the business.

The amount paid by each division for the materials to be used in the repair of clothing ranges from 25,000 to 30,000 *yen*. The purchase of these materials is made by dividing them into smaller lots, and some ten merchants are engaged in their supply. One division divides the materials into the following lots:

Materials to be used in tailoring and laundry work, those to be used in the repair of caps, those to be used in laundry work, train oil, those to be used in the repair of sewing machines, leathers, naphthalin, scissors, patent leather belts.

Turning our attention to the purchase of provisions at each division, let us first look at the apportionment of boarding per day.

BOARDING OF A SOLDIER PER DAY[a]

Sen		
11.7	The First Jurisdiction	(the 7th division)
9.3	The Second Jurisdiction	(the 1st and the 4th divisions)
9.0	The Third Jurisdiction	(the 2d, the 8th, the 12th, the 13th, the 14th, and the 16th divisions)
8.7	The Fourth Jurisdiction	(the 6th, the 9th, the 10th, the 11th, the 15th, and the 18th divisions)
8.4	The Fifth Jurisdiction	(the 3d, the 5th, and the 17th divisions)

[a] Allowance of 2.4 more, on a field day, and of 2.0 on other occasions.

For the sake of convenience, let us take nine *sen* as the average. The number of soldiers in all the divisions in the country is 220,000, and the amount paid for their boarding every year is about 7,300,000 *yen*. Each division pays 300,000 to 350,000 *yen*. The number of suppliers at a certain infantry regiment is as follows: Dealers in vegetables and dried vegetables, 3; dealers in fish, 3; dealers in soy and pickles, 3; dealers in beef and pork, 2; dealers in sugar, 3; dealers in chicken and eggs, 1; dealers in confectioneries, 3; dealers in fuels, 2; dealers in wines, 2. In cases where several corps are quartered at the same place, the same class of dealers transact their business with the several corps.

The articles required for encampment and the articles of consumption vary a great deal, according to the different branches of the army. The quantities will be given later. Roughly estimated, the amount of money paid for these things by each division is about 80,000 *yen*. In this case, as in the case of boarding, the suppliers are divided into small classes. In a certain infantry regiment, they are as follows: dealers in new articles for encampment, 2; dealers in metals to be used for repairs, 1; dealers in fuels, 2; dealers in timber for repairs, 1; dealers in holders for maps and atlases, 2; dealers in electric lamps and batteries, 1; dealers in cotton, 1; dealers in drugs, 1. All of these dealers are merchants of small means. Of the twenty-eight dealers connected with the headquarters of a certain division, only three possess property above ten thousand *yen* in value.

Sutlers sell wines, rice cakes, sweet cakes, vermicelli, cooked food, stamps, handkerchiefs, canned food, etc., the kinds and quantities of these things being determined by the head officer of each company. The proceeds of the sale vary according to the place where troops are stationed, but the amount is about equal to that of the wages soldiers receive. This can be said even of the proceeds of the sutlers in the Eighth Division, whose soldiers come from the most impoverished districts in the country.

AMOUNT EXPENDED AT SUTLERS' BY A CERTAIN COMPANY, EIGHTH DIVISION, APRIL–JUNE, 1914

Articles	April		May		June	
	Amount Expended	Average per soldier per day	Amount Expended	Average per soldier per day	Amount Expended	Average per soldier per day
	Yen	*Yen*	*Yen*	*Yen*	*Yen*	*Yen*
Eatables and drinks	612.150	0.034	726.190	0.040	649.150	0.036
Wine	49.700	0.0027	57.000	0.0032	56.000	0.0031
Stamps	59.000	0.0032	71.650	0.0039	64.100	0.0035
Handkerchiefs, tooth powder, etc.	32.210	0.0021	68.220	0.0037	67.700	0.0037
Canned food	22.375	0.0012	13.939	0.0007	17.900	0.009
Tobacco	190.380	0.010	165.520	0.009	157.290	0.007
Total	965.815	0.054	1,102.525	0.061	1,012.192	0.056

Average wages, per soldier, per week { Noncommissioned officers 0.0724; Soldiers 0.0538

About the same situation is found in the Seventh Division. The following is the amount expended at the sutlers belonging to this division, per soldier, per year, April, 1913, to March, 1914:

	Yen
The 25th Infantry Regiment	16.06
The 26th " "	14.34
The 27th " "	15.62
The 28th " "	14.17
The 7th Cavalry Regiment	21.20
The 7th Field Artillery Regiment	23.70
The Hakodate Heavy Artillery Corps	17.57
The 7th Commissariat Battalion	22.26
The Asahigawa Hospital	34.30
The 7th Engineering Battalion	18.94

Statistics prepared by the Fourteenth Division indicate similar facts. The following is the proceeds of the sutler of this division, per soldier, per month, April, 1912, to March, 1913:

	Yen
The 2d Infantry Regiment	1.66
The 15th " "	1.02
The 59th " "	1.45
The 66th " "	1.68
The 18th Cavalry Regiment	1.40
The 20th Field Artillery Regiment	1.84
The 14th Engineering Battalion	1.47
The 14th Commissariat Battalion	1.87

As the soldier's average wage per year is some nineteen *yen*, nearly the whole of their wages is spent at the sutlers. Of the statistics prepared by the Sixteenth and Eighteenth Divisions, we shall see later. The average sum expended at the sutlers per division would then be 180,000 to 200,000 *yen*. In short, the wages of soldiers go into the hands of sutlers, but not into the hands of merchants at large. But the net proceeds of the sutlers are very little. According to statistics prepared by the Sixteenth Division, they range from 18 per cent to 43 per cent, the average being only 30 per cent.

As to the amount of the total expenses of the soldiers, it is difficult to estimate. Admitting as true certain statements to be made later, the amount of money that they get from home annually is thirty *yen*, on an average. As we have seen above, their wages are spent at the sutler, and their savings out of their wages are too little to be of any account. And the thirty *yen* that they get from home is spent outside the barracks. The amount throughout the divisions will reach six million *yen* at least. As to the amount of money spent by the soldiers living out of the barracks, and by the parents, relatives, or friends who pay visits to the soldiers living in the barracks, we have no means of ascertaining. There is no doubt that the merchants who get the benefit from such soldiers and such people are below the middle class.

So much for commerce; now for manufactures. The various manufacturers that are supported by the system of conscription may be classified as follows: (1) Those who meet the demands of each corps or each individual soldier at the place where they are quartered. They manufacture tools for encampment, or make articles of consumption, or make clothing. They engage in the construction or repair of barracks and other buildings. (2) Those who engage in the works belonging to the different factories under the direct control of the Military Department. The factories are the arsenals and their branches, the Provision Bureau and its branches, the Clothing Department, and the Senju Woolen Factory, etc.

(3) Those who make goods or articles that are to be sent in to the different factories above as manufactured goods. Generally speaking, the third class of manufacturers must be wealthier, for they must produce large quantities of goods of a uniform quality. The first class of manufacturers meet individual demands and, therefore, need not necessarily carry on their business on a large scale. It is thought in some quarters that the system of conscription gives benefits only to capitalists, but this is not so, for both the great manufacturing works that are carried on by individual capitalists, and the different factories under the direct control of the Military Department, have to employ a great number of workmen.

According to the annual report of the Military Department, published in 1911, the number of the workmen employed at the different factories is as follows:

Factories	Employes		Laborers			Total of Male Employes and Laborers
	Men	Women	Men	Women	Total	
Tokyo arsenal	14,727	3,129	...	...	...	14,727
Osaka arsenal	9,915	813	172	...	172	10,087
Clothing Department including branches	1,406	1,891	103	95	198	1,509
Provision Bureau, including branches	264	214	75	26	101	339
Senju Woolen Factory	504	566	33	...	33	537
Draughtsmen	15	0	...	...	...	15
Total	26,831	6,613	383	121	504	27,214

Our estimate is that in the factories above are employed about 25,000 workmen, excepting men below age twenty and women not supporting their families.

Our next task is to ascertain the number of the manufacturers who meet the individual demands of troops or soldiers at the place where they are stationed. But this is by no means easy. The same difficulty will be found when we want to know the exact number of merchants belonging to the different classes enumerated at the beginning of this section, from the fourth downwards. We have but one way to get

the total number of such people, and that is an indirect way. Suppose that there is a given town of small size that has no particular cause of prosperity other than the establishment of new troops. We may then regard the increase of its merchants or manufacturers as the result of the establishment of new troops. Of course, the establishment may give rise to some other conditions in which people come together. So, we may not say, even in this case, that the whole of the increase in the inhabitants is due directly to the stationing of troops.

We may, however, say this much, that the increase of inhabitants due directly to the establishment is not more than that whole. The more remote the place, the more would the actual increase approach the increase of employments due directly to the establishment. We take the town of Zentsuji as the example.

What is then the increase of employments at Zentsuji, since the establishment of a new division? The records of the town ten years ago were not kept in good order, but we can make a generalization from the fragments. The number of merchants and manufacturers at about the time of the establishment was as shown on the facing page.

Until 1898 these three villages existed separately, and were united into a town, Zentsuji by name, in 1899. Some of the figures above do not belong to the same year. But the difference of one year was little in these villages, so our total overlooks this difference. The year 1910 was the year in which this division was despatched to Manchuria; hence, a considerable decrease in the figures.

The fact that the average of the figures for the four years, 1905 to 1908, rose to 1,600, but came down to the average of 1,500, in the succeeding years, may be taken as an evidence that the increase of employments caused by the establishment of the division, reached its maximum. Excepting the figures for 1910, the average of the last three years in the above table is about 1,500. And the number of manufacturers and salesmen, previous to the establishment, was about six hun-

Year	Village	Salesmen	Manufacturers	Restaurant keepers	Bar keepers	Bath-house keepers	Barbers	Rikisha Men	Total
1893	Yoshida	84	33	0	10	1	0	41	169
1893	Asano	97	13	0	19	0	1	24	164
1894	Zentsuji	153	70	1	24	4	5	9	266
	Total	334	126	1	53	5	6	74	599
	BETWEEN 1894 AND 1897 THE DIVISION WAS ESTABLISHED								
1897	Yoshida	114	55	4	30	3	3	63	272
1897	Asano	110	45	0	31	0	3	15	204
1897	Zentsuji	200	..	..	..	..	..	..	200
	Total	424	100	4	61	3	6	78	676
1898	Yoshida	174	67	11	38	5	4	55	354
1898	Asano	151	53	0	0	1	5	8	218
1898	Zentsuji	282	..	..	..	..	..	..	282
1899	Zentsuji	...	201	25	85	7	22	11	351
	Total	607	321	36	123	13	31	74	1,205
1903		807	327	42	139	17	48	103	1,483
1904		906	312	44	178	19	57	54	1,570
1905		926	328	55	207	17	56	69	1,658
1906		888	318	34	190	19	59	50	1,558
1907		790	367	33	164	23	55	41	1,473
1908		915	384	22	161	21	51	50	1,604
1909		853	353	24	152	21	55	47	1,505
1910		820	327	14	123	22	54	44	1,404
1911		861	359	53	106	21	63	52	1,515
1912		857	342	41	109	23	58	69	1,499

dred. Hence, the increase 1,500 less 600 is 900. On the other hand, the average increase of inhabitants in the surrounding villages, during the same period, was 9 per cent, from which we may infer that the increase of employments in these villages was also 9 per cent. Of the difference of 900 above, some 50 would represent the natural increase—600×9 per cent=54.

The increase, directly caused by the establishment of new troops, was, therefore, 850. Suppose each of these 850 employments supports five people, then their total number will be 4,250. Now, the special increase of the population of this town, compared with that of other villages near by, is about 5,400. Deducting 4,250 above from this 5,400, we get the balance of 1,150. If the three hundred families of the soldiers stationed at Zentsuji consist each of four persons, then we get 1,200, which is approximate to the 1,150 above. Following is a table showing the number of specialists and

men above noncommissioned officers who belong to the different military offices and troops at Zentsuji.

The Ordnance Depot	14	The 11th Garrison Hospital	46
Headquarters of the Regiment District	13	The 11th Garrison Prison	10
The Administrative Staff	26	The Judiciary Office	4
The Accounts Office	22	The Surgeons' Office	3
The Veterinary Surgeons' Office	2	Headquarters of the 22d Brigade	3
The 43d Infantry Regiment	99	The 11th Cavalry Regiment	30
The 11th Field Artillery Regiment	52	The 11th Engineers Battalion	26
The 11th Commissariat Battalion	24	The Gendarmerie	18
		Total	392

Supposing that about 80 per cent short of this total number have their families, we get the figures, 300.

All other branches of the army, except the infantry, are usually quartered at the place where a division is stationed. But of the four regiments that belong to a division, three are usually stationed away from it. How many get their livelihood from these three regiments can only be known indirectly. The number of the manufacturers and merchants is determined by the amount of money that is expended by troops. The approximate number of the noncommissioned officers and men of a regiment is eighteen hundred, and that of the noncommissioned officers and men of the special branches (the field artillery, the cavalry, the engineering, commissariat, etc.) is about nineteen hundred and fifty. The number of soldiers at the place where regiments are quartered is about half of the number of soldiers at the place where a division is stationed. It may appear, at first thought, that half of the money that is spent at the latter place goes to the former place. But this is not really so, for (1) men of the special branches have more expenses than those of the infantry (especially in horses and fodder); (2) in some divisions, some articles are purchased altogether for their companies (*i.e.*, socks, shirts, etc.); (3) higher officials of special offices are stationed where divisions are. We think, therefore, that only one-third of the money spent by a division, including the special branches, goes to the place where regiments are quartered. In other words, the number of the manufacturers and merchants who

earn their livelihood from the regiments is about two hundred and eighty, that is, $\frac{850}{3}$. In this estimate of ours, we have taken into consideration such circumstances as will cause slight variations in the incidentals of individual soldiers.

Of the seventy-six infantry regiments, forty-nine are quartered at places where divisions are not stationed. Six of them are stationed at the same places as divisions. The eleven places that have each a division have each two regiments. Asahigawa and Tokyo, where a division is stationed, have three and six regiments, respectively. Our estimate of the total number of commercial and manufacturing employments supported by these regiments would then be—

$$850\times19+280\times18+280\times49-16,150+5040+13,720=24,910.$$

Besides these regiments, there are a few more, such as the four cavalry regiments at Narashino, the two cavalry regiments at Toyohashi and at Morioka, the four field artillery regiments at Kokubudai and Shimoshidzu, the six heavy artillery regiments, distributed among Yokosuka, Yura, Hiroshima and Shimonoseki, and one railway regiment at Chiba. According to our estimate, these regiments support about half of the total number of the commercial and manufacturing employments supported by the regiments we have seen in the preceding paragraph, which would then number about twenty-seven hundred. Adding this number to the twenty-four thousand and odd in the preceding paragraph, we get the total of about twenty-eight thousand.

Furthermore, we must get the number of employments that are obtained through the transaction of raw materials and manufactures supplied to the different factories of the army, and that of employments that are obtained through the manufacture ot the finished articles. Let us first consider the former:

		Yen
The amount supplied to the Provision and Clothes Department	about	6,000,000
The amount supplied to the Arsenal Department	about	9,000,000
The amount supplied to the Fodder Department	about	1,000,000
Total	about	16,000,000
Other amounts	about	3,200,000
Grand total	about	19,200,000

According to the *Yorodzu*, September, 1914, ordinary commercial interest is about 1 per cent. If we calculate the sum total of interests, and suppose that one employment needs three hundred *yen* (but the dealers are in fact rich merchants, who need much more), the number of employments that we seek will not be more than 6,000. In the case of the latter:

		Yen
Homemade manufactures supplied to the Clothes Department	about	4,300,000
Homemade manufactures supplied to the Fodder Department	about	100,000
Total	about	4,400,000

The industrial interest today will not be more than 2 per cent.[1] The number of employments obtained will be about two thousand.

The above is only a rough estimate, but when we consider the number of employments obtained by the conscription system, we shall find it to be—

Military factories	25,000
Manufacturers and merchants at places where troops are stationed	28,000
Those obtained by manufacture of finished articles supplied to military factories	8,000
Total	61,000

Summary

We may now summarize the separate treatments of the effects of the system of conscription upon the increase of employments, agricultural, commercial and manufacturing. We have seen that the increase of agricultural employments is balanced by their decrease. The work of the Horse Supply Department has been neglected, because the 5,000 *cho* of arable land, belonging to the department, had been cultivated land before it was turned to its present use. The part that was brought under cultivation by the department was so little that we might well overlook it. There was scarcely any room for new employments. As to the decrease of the arable land to the extent of 7,500 *cho*, our estimate is

[1] *Yorodzu*, September, 1914.

perhaps too moderate. Hence, we have little reason to recognize any increase of agricultural employments.

The effects upon commercial and manufacturing employments are their increase, as we have shown above. Our estimate was that the increase would not exceed sixty thousand. Even if sixty thousand, not the whole of it is due to the system of conscription. The chief employments are, as we have seen, either those concerning munitions, such as arms and clothing, and those concerning the individual wants, such as eatables or drinkables or miscellaneous goods of daily use. Now, there is no doubt that a greater part of the latter will be in demand, even if the system of conscription did not require men to be enlisted in the army.

To our mind, there are only four circumstances in which the individual wants of soldiers have to be met by commercial and manufacturing employments that owe their existence to the system of conscription.

(1) Where even self-supporting soldiers have to buy the articles of daily necessity from the merchants connected with troops; (2) where soldiers are in want of more articles than at home, because they are paid better in the army than at home; (3) where they are in want of more and better articles, because of emulation and imitation of city life; and (4) where the uniformity of wants among soldiers requires the supply from such merchants. Apart from these circumstances, the increase of employments, consequent to the establishment of new troops, only balances the decrease of employments, consequent to the soldiers' leaving home. Such being the case, it is absolutely impossible to tell just how many of the sixty thousand new employments are the sole result of the establishment of new troops. Let us, however, admit, for the sake of argument, that the whole of the number is due to troops.

All of the employments discussed above are productive. But we must not overlook those nonproductive employments, of which there are three classes. The employments of officers are permanent, those of noncommissioned officers last for a

considerable period and those of soldiers are entirely temporary. The first are purely professional, the second half professional, and the third not professional at all.

Our estimate of the number of these three classes, based on the Military and the Naval Annual Report, is as follows:

ARMY, 1912

Officers, Including Semi-Officers and Cadets

	Offices, General and Special	Troops	Gendarmerie	Total
Generals, and those ranking with them..	64	85	2	151
Field officers, and those ranking with them	594	1,143	41	1,778
Company officers, and those ranking with them	1,443	9,998	220	11,661
Semi-officers and cadets	360	2,185	73	2,618
Total	2,461	13,411	336	16,208

Noncommissioned Officers

Offices, general and special	3,077
Troops (at home)	12,286
Gendarmerie	1,171
Troops (abroad; roughly estimated)	2,435
Total	18,969

Common Soldiers, Including All Soldiers Not Mentioned Above

Troops (at home)	166,688
Troops (abroad; roughly estimated)	33,358
Gendarmerie	7,811
Total	207,857

Those Attached to the Army

Offices, general and special	8,009
Troops	1,326
Gendarmerie	1,335
Total	10,670

NAVY, 1912

Officers

Admirals, and those ranking with them	105
Captains	1,187
Junior officers	3,003
Cadets	224
Semi-officers	1,167
Total	5,686
Noncommissioned officers	10,516
Sailors	37,873
Those attached to the navy	1,189

In the army, the total number of the officers and noncommissioned officers whose employments are either permanent or last for a considerable period is 35,000. The officers and others in the navy are 16,000 of the total number. Of these 51,000 military and naval officers and others, most of the regular officers did not originally belong to the producing classes. Now, when we see that many who belong to the same class as the officers are in want of employment, we can understand that the employments in the army and the navy are to that extent a help to those who seek employment in other lines. As to the noncommissioned officers and others below them, we all know that most of them are from the lower classes, and are originally productive laborers. Their number, throughout the army and the navy, is about 30,000. The nation is therefore deprived of so much labor in the same manner as it is deprived of the 200,000 laborers in the case of common soldiers. If we want to know exactly the effects of the system of conscription upon the national economy, we must first know how many people get their employment by the existence of these 30,000 noncommissioned officers and 200,000 common soldiers. We must also consider the question whether or not the increase of the sixty thousand commercial and manufactural employments is purely the result of the existence of troops.

CHAPTER V

EFFECTS ON LABOR

Of the two factors that determine production—employment and labor—the former has already been considered. The next problem is the effect of the system of conscription upon labor, which has two aspects, the quality and the quantity of labor. Any changes in either of these two aspects have a significance of great importance in the determination of productive power. By the quality of labor, we mean the efficiency of laborers, and by the quantity of labor, their number. We are now to study the effects of conscription upon these two aspects of labor.

Efficiency of Labor

Laborers' efficiency is determined by their skill, strength and character, especially their discipline. The effects of conscription upon such qualities are difficult to ascertain, except through various, indirect ways.

Molding of Character

The army is a national school, so to speak. This is especially the case with the Japanese Army, which aims at the cultivation of such virtues as courage, loyalty, uprightness, deriving the fundamental principles of discipline from the Imperial Rescript given to the soldiers in 1882. In no schools is emphasized the importance of spiritual education as in the army. The military life is as regular and as punctual as a machine. Soldiers get accustomed to this life until it becomes their second nature. Remarkable is the effect of such a life for two or three years upon the improvement of their character. Soldiers are looked up to among the people, especially among the laboring classes. Those who have served in the army feel a moral strain in their efforts not to dishonor their standing. Consequently, the discharged soldiers in the country are generally regular and rigorous in their habits and

devoted to their trade. This is a fact not only emphasized by the soldiers themselves but recognized by the people at large. This being the case, there can be no doubt that the military life has a wholesome effect upon the efficiency of laborers.

Although we have no direct proof of such an effect, yet we are able to produce evidences of an indirect nature.

(1) The number and percentage of the prisoners among discharged soldiers, in a certain regimental district, during the year 1912, is as follows (both the number of prisoners and that of soldiers being multiplied by n):

Gendarmes	Infantry Soldiers	Cavalry Soldiers	Field Artillery Soldiers	Heavy Artillery Soldiers	Engineers	Commissariats	Accountants	Medical Privates	Total
2	224	0	34	4	8	172	0	2	446

Branches	Number of Soldiers	Percentage	Branches	Number of Soldiers	Percentage
Gendarmerie.....	68	2.65	Engineers.....	2,102	3.80
Infantry.....	41,488	0.54	Commissariat...	26,214	0.66
Cavalry.....	1,270	....	Accountant.....	336	....
Field and Heavy Artillery.....	6,514	0.68	Health Dept....	788	0.25
			Total.....	78,780	0.552

We can not know what difference there is between the criminal percentage of this regimental district and that of other districts. But the former percentage is presumably not smaller than the latter, for we know that about one-sixth of the population of this district lives in a large town, where cases of criminal offenses take place frequently. Let us now look at the percentage of prisoners of the same age as these soldiers:

Year	Ages 20 to 30			Ages 30 to 40		
	Heavy Offense	Light Offense	Total	Heavy Offense	Light Offense	Total
1907	0.02	0.5	0.5	0.02	0.5	0.5
1906	0.02	0.5	0.5	0.02	0.5	0.5
1905	0.02	0.5	0.5	0.02	0.4	0.4

In this average percentage is included that of both men and women of the same age. We must find the average percentage of men alone.

Year	Women Prisoners per 100,000			Men Prisoners per 100,000		
	For Light Offenses	For Heavy Offenses	Total	For Light Offenses	For Heavy Offenses	Total
1907	25.7	1.9	27.6	329.3	17.0	346.3
1906	26.8	1.7	28.5	333.1	18.3	351.4

On the strength of the above table, the percentage of prisoners to the total number of men between twenty years and forty years of age, supposing the number of men as being equal to that of women, is estimated as follows:

$$0.5\times\frac{(329.3+17.0)+(333.1+18.3)}{(329.3+17.0)+(333.1+18.3)+(25.7+1.9)+(26.8+1.7)}\times 2=0.925.$$

Those convicted of heavy offenses may not serve in the army, according to the law of conscription (article 8). As they are expelled from the list of available conscripts, this will mean a decrease of so much in the criminal percentage among discharged prisoners. But we shall not consider this question for the time being, because the number of discharged soldiers convicted of heavy offenses is very small, compared with that of ordinary people of the same age, and because those who are enlisted in the army are able bodied, and consequently are prone to crime. We shall see later how it comes that the able bodied are prone to crime. If we now compare the per-

centage of 0.925 among the common men with that of 0.552 among discharged soldiers, we shall see that the military life has had much to do with producing such a difference.[1]

The number of prisoners during these years was as follows:

1905	75,402
1906	79,409
1907	78,873
1908	78,265
1909	104,896

(2) The branches to which the prisoners and convicts among discharged soldiers belong have to be considered, in their bearing upon the character of soldiers. The following is a table showing the percentage of the convicts from January 1 to December 31, 1912, and the prisoners of another regimental district from January 1 to December 31, 1911, together with the branch of service.

PERCENTAGE OF PRISONERS (INCLUDING CONTRAVENTIONS OF POLICE REGULATIONS) TO SOLDIERS AND NONCOMMISSIONED OFFICERS OF ARMY

Branches	Percentage of Prisoners	Percentage of Convicts	Average of the Two Percentages
Gendarmerie	2.647[a]	2.647[a]	2.647[a]
Infantry	0.622	0.448	0.504
Cavalry	0	0	0
Field and heavy artillery	0.583	0.522	0.552
Engineering	0.951	0.571	0.761
Commissariat	0.694	0.610	0.652
Accountant	0	0	0
Medical	0.507	0.254[a]	0.371[a]
Total	0.640	0.500	0.566

[a] Left out of consideration because their absolute numerical basis is too small.

Of the average figures above, those of engineering are greatest, for which there are certain special reasons. Most of the crimes committed by the discharged soldiers of this branch are committed in cities. The total number of conscripts belonging to this regimental district was 10,478 in 1912, of which 3,291 belong to the subdivisions of the regimental

[1] Objections may be raised to our basing the comparison upon the figures taken from the years in which the present criminal cases among the common people have increased since 1908, when the Criminal Code went into effect. The difference due to the military life will then be still greater.

districts. The rate of the distribution of discharged soldiers may be regarded as almost the same as that of the conscripts above, that is, seven in the country against three in the cities. Of the two hundred and fifty-two prisoners above, two hundred and fifteen, that is, 85 per cent, belong to cities. Of the one hundred and ninety-seven convicts above, one hundred and sixty-one, that is, 86 per cent, belong also to cities. Most of the discharged soldiers belonging to the engineering branch are residents of cities, the reasons for which are not far to seek. Of the special branches of the army, the engineering especially selects its men from those connected with mechanics. Such men are more usually found in cities than in the rural districts. Therefore, most of the engineering soldiers are from cities, and hence the percentage of their crimes is large. We may therefore say that there are special reasons for the large percentage of crimes in this case. Next to them in percentage comes the commissariat soldiers. The average percentage of either convicts or prisoners among the commissariats is only exceeded by the engineers. And this is so not because most of the former are from the districts as in the case of the latter, but because most of them, especially the auxiliaries, receive military training only for a short period. Of the total number of men, 13,000, belonging to this branch of the army, only three hundred receive military education for two or three years, as in the case of men belonging to other branches. All others are either lacking in military training or are trained incompletely. Sixty-seven per cent of them are lacking in training, and 31 per cent receive it only for a short time. In other words, they have far less chances of living in the moral atmosphere of the army than the other regular soldiers. It is therefore not surprising that the percentage of their crimes is large. This is not merely a personal opinion, but a fact generally recognized by the officers in the army. We have also to consider another question. Why is it that the percentage of crimes among the supplementaries of the infantry is comparatively small, in spite of the fact that they, as well as the commissariat auxiliaries, are either lacking or incomplete in their training? In fact, the

percentage of their crimes is less than that of the crimes committed by the soldiers of the artillery. Of the total number of the discharged soldiers of the infantry, 10/21 are lacking in training, and 3/21 are trained incompletely. And the crime percentage of the infantry soldiers who receive training for the full length of their term is larger than that of the commissariats. This is the reason why the former have .504 per cent of crimes against the .654 of the latter. As to the fact that the infantry has a comparatively large number of men deficient in education, we can say that their 62 per cent is not very large, for even the artillery has 55 per cent of the men deficient in education. We can easily see why the infantry has .504 of crimes against .552 of the artillery, if we take into consideration the following circumstances:

(1) Both the infantry and the cavalry can devote their whole energy and time to military discipline, while both the artillery or the engineering must devote their energy and time to special arts as well as to military discipline. This is one reason why the infantry and the cavalry have a less percentage of crimes.

(2) The artillery selects its men from the conscripts who are of greater size and strength. Consequently, ill behavior and bad manners and habits obtain among them. A larger quantity of wine and tobacco is in greater demand among them than among any others.

AVERAGE AMOUNT EXPENDED AT SUTLERS PER SOLDIER PER MONTH, 1911

Regiments and Battalions	Tobacco	Sundries	Sweet Cakes	Stamps	Wine	Other Eatables and Beverages
	Sen	*Sen*	*Sen*	*Sen*	*Sen*	*Sen*
The 9th Infantry Regiment	34	9	70	12	5	21
The 19th Regiment	22	18	7	11	6	72
The 38th Regiment	24	9	78	7	9	30
The 53rd Regiment	23	10	46	11	8	36
The 20th Cavalry Regiment	43	13	68	19	7	37
The 20th Field Artillery Regiment	50	12	37	19	49	43
The 16th Engineering Battalion	33	11	50	13	20	38
The 16th Commissariat Battalion	39	18	43	13	15	64

The table above confirms the opinion that the percentage of crimes is larger in the artillery than in the infantry. Taking all the special circumstances of each branch of the army into consideration, we may say that the larger the percentage of soldiers deficient in training, the larger the percentage of crime. In other words, the military life has a great influence upon the molding of character.

(3) Of the total number of noncommissioned officers and common soldiers within the regimental district above, the percentage of the former is 3.34 per cent. Of this number of noncommissioned officers, none was convicted of any crimes in 1912, while only three were arrested in 1911. But, if it be true that they have a tendency to crimes in the same way as common soldiers, then there should have been six prisoners among the former and eight prisoners among the latter. The fact that there were only three prisoners among the noncommissioned officers in the said year may be taken as an evidence of the healthy effects of the military life upon their character.

Although we have not been able to give direct proof that the military life enhances the character of soldiers, yet the small percentage of crimes among soldiers must be indirect evidence that their character is being molded by the military discipline. Of the different good qualities that they get from such a discipline, regularity or punctuality seems to be the greatest, of which, however, we can produce no evidence.

Spread of Education

The skill of laborers has much to do with their efficiency, and the degree of their skill depends, broadly speaking, upon two conditions—the physical and the mental habit, or the automatism of the bodily and the mental powers and the increase of knowledge. Does the military life promote or impede such automatism? To such a question, we can not make any sweeping answer. With those whose business requires the use of the fingers, two or three years of military life may cause retrogression in their skill. This would especially be the case with those engaged in art. On the contrary, there are certain classes of people, who acquire their skill because of their life in the army. Of 230,000 soldiers, about 10,800 are employed

in engineering, railway or telegraphic works (about 8,000 engineers, about 1,800 railway corps, and about 1,000 telegraph corps). Their business may be different from what they engage in when at home, but there is no doubt that they get a certain degree of skill because of such work in the army. Cobblers in the army are the only soldiers that engage in productive work exclusively, but their average number, including 44 first class cobblers per day and 171 first and second class cobblers per day, is little more than two hundred per day.[1] No doubt they get their skill because of their life in the army, but their number is so small that we may overlook them.

The degree of skill, if understood in the sense of the increase of knowledge, is clearly accelerated by military training. But, if we mean by knowledge only the advanced knowledge that is not necessary for productive laborers, we should say that soldiers are deprived of any chances of gaining such knowledge. Let us now look at the actual conditions in barrack life. We do not find any considerable progress in knowledge among those soldiers, who have finished the higher elementary course before entering barracks, because the degree of knowledge they have gained is sufficient for the military life. But those meet with difficulties who enter barracks before finishing the course. This is especially the case with those who have finished only the ordinary elementary course, but, after entering barracks, wish to become superior privates. In order to escape from the difficulties and inconveniences, consequent upon the insufficiency of knowledge, they spend their private hours in reading. Some of them are so stirred in their desire for learning that they study transcripts of lectures of middle school grades. Such studies are not compulsory but are encouraged by superior officers, who help them in their studies. Of course, one's talent has much to do with the progress of learning, and we can not make any general statement about the degree of progress among soldiers. But it is a fact generally recognized that those who were entirely lacking in the knowledge of reading and arithmetic are now able to understand them to a certain extent. Those who could not

[1] *Military Department Annual Report*, 1910.

write their own letters home are now able to write them in the *kana* syllabary. And those, who have acquired this amount of learning will, before leaving barracks, have attained a scholarship equal to the ordinary elementary course. With regard to those who are already in possession of the scholarship equal to this course, their degrees of progress are varied to a large extent. Some of the superior privates show considerable progress, while others show no signs of progress. The following tables will give an idea of the progress of learning among soldiers:

DEGREE OF SCHOLARSHIP OF CONSCRIPTS, 1908

Conscripts	First Class	Second Class		Third Class	Fourth Class	Fifth Class	Total
		A	B				
A University graduates	70	57	102	195	107	4	535
B Those on equal footing with the above	156	154	186	327	118	13	954
C College graduates	52	55	52	91	34	2	286
D Those on equal footing with the above	129	112	107	170	73	8	599
E Those completing the middle school course	2,549	1,428	1,438	2,419	933	105	8,872
F Those on equal footing with the above	3,621	1,949	1,783	2,490	807	137	10,787
G Those completing the higher elementary course	35,010	13,942	10,770	15,239	4,235	744	79,940
H Those on equal footing with the above	19,200	7,487	5,791	9,029	2,279	422	44,208
I Those completing the ordinary elementary course	71,476	28,878	23,709	38,480	11,338	1,595	175,476
J Those on equal footing with the above	13,509	6,196	4,986	8,734	2,532	372	36,330
K Those having some knowledge of reading and arithmetic	19,429	8,825	8,057	14,352	4,849	496	56,008
L Illiterates	6,842	3,538	3,169	6,797	4,684	241	25,271
Total	172,043	72,621	60,150	98,323	31,989	4,140	439,266

DEGREE OF SCHOLARSHIP OF CONSCRIPTS, 1909

Conscripts	First Class	Second Class		Third Class	Fourth Class	Fifth Class	Total
		A	B				
A	82	90	110	245	110	2	639
B	136	150	168	325	101	8	888
C	75	85	97	189	72	3	521
D	153	139	116	269	97	8	782
E	2,765	1,631	1,624	2,552	958	168	9,698
F	3,551	1,945	1,695	2,280	742	170	10,383
G	38,117	16,965	12,449	15,202	4,278	1,320	88,331
H	17,807	7,571	5,212	7,720	2,155	583	41,048
I	77,456	34,643	25,265	39,520	11,671	2,936	191,491
J	12,326	5,630	4,088	7,549	2,360	572	32,525
K	18,726	8,856	7,795	13,554	4,655	832	54,418
L	6,121	3,153	2,745	5,776	4,366	390	22,551
Total	177,315	80,858	61,364	95,152	31,565	6,992	453,275

DEGREE OF SCHOLARSHIP OF CONSCRIPTS, 1910

Conscripts	First Class	Second Class		Third Class	Fourth Class	Fifth Class	Total
		A	B				
A	120	102	144	381	53	7	807
B	101	119	148	328	57	7	755
C	81	63	100	207	26	6	483
D	114	125	177	303	50	8	777
E	2,678	1,548	1,813	2,984	630	169	9,822
F	3,139	1,676	1,912	2,542	505	178	9,952
G	38,177	15,918	14,059	16,518	3,926	1,199	89,797
H	17,313	6,728	5,560	8,104	1,878	584	40,167
I	74,597	30,555	24,479	38,668	10,346	2,467	181,112
J	11,987	5,039	4,246	7,793	2,153	591	31,809
K	17,921	7,723	6,479	11,933	4,027	705	48,788
L	4,922	2,415	2,067	4,733	4,088	291	18,516
Total	171,150	72,011	61,184	94,494	27,739	6,212	432,785

Of the different grades of the first class conscripts, the average number for the three years above of those whose progress in learning was considerable, is as follows:

L	5,962
K	18,692
J	12,274
I	74,530
Total	111,458

The percentage of this total number to the total of the first class conscripts is 64 per cent. Now, if all the first class conscripts are to be alike enrolled in the active service, then about half of them will become actives. In other words, about fifty-five thousand of the annual conscripts for the active service are raising the standard of scholarship, because of their military life, though we must deduct from the number the commissariat and the artillery auxiliaries, who receive military training only for a short time. As these fifty-five thousand soldiers have to earn their livelihood by some sort of industry when they are discharged, the acquisition of this knowledge while in the active service must be of much help to the efficiency of their labor. This effect of military discipline upon labor will the more strongly be felt as the demand for skilled laborers increases. There may be some people who think that the acquisition of knowledge by soldiers will make them abhor productive labor. But, to our mind, it

seems that men with such a degree of knowledge as we have seen have no other way to earn their livelihood than by physical labor.

Physical Training

The dependence of the efficiency of labor upon one's bodily strength is a fact as evident as the healthy effect of the military life upon physical training. Our task now is to produce evidences for such effects. There are some who try to get the necessary materials for their investigation by comparing the bodily development of soldiers with that of students in schools or of those engaged in various industries. But this is a dangerous method, because either students or those in business are constitutionally inferior to the soldiers of the same age. Those who are constitutionally different undergo also different developments. Supposing that there is a difference of development between soldiers and students, such a difference alone is not sufficient for proving the efficiency of military training.

The efficiency can only be known when we establish a comparison between those who are under the strict discipline of military life and those whose constitution is almost similar to theirs, but whose business is entirely different. It is difficult to obtain proper materials for such an investigation. Fortunately, however, we have one thing which suits our purpose, and that is the development of the physique of the soldiers belonging to the different branches of the army.

Let us now compare the physique of infantry soldiers with that of the privates of the medical corps, for they are the two extremes of the military life. The former have little to do with technique, but devote their time to physical and mental training, while the very nature of the work of the latter leads them away from military training. If there is any difference between them, it is because one leads a purely military life, while the latter leads a semi-military life. Originally, both of them were selected and enrolled according to the same constitution. Besides, all the conditions concerning food, clothing, dwelling, etc., are the same. The only difference

would then be that of training and work. The following is based on the *Military Department Annual Report*, published in 1909 and 1910:

PHYSIQUE OF INFANTRY SOLDIERS, 1910

Period of Examination	Number of Conscripts Examined	Age	Height	Weight	Chest	Expansion
			Shaku	*Kan*	*Shaku*	
First period[a]	....	20.07	5.29	14.815	2.78	2.3
Second "	49,648	21.07	5.31	15.358	2.83	2.4
Third "	....	22.07	5.32	15.473	2.85	2.5
1909						
First period	....	20.07	5.29	14.757	2.78	2.3
Second "	43,900	21.07	5.30	15.294	2.81	2.4
Third "	....	22.07	5.32	15.433	2.82	2.3

[a] The first period means the first month of enrollment, the second, one full year after enrollment, and the third, the next one full year.

PHYSIQUE OF PRIVATES OF MEDICAL CORPS, 1910

Period of Examination	Number of Conscripts Examined	Age	Height	Weight	Chest	Expansion
			Shaku	*Kan*	*Shaku*	
First period	....	20.06	5.35	14.654	2.72	2.3
Second "	2,370	21.06	5.36	15.276	2.77	2.55
Third "	....	22.06	5.37	13.203	2.76	2.6
1909						
First period	....	20.09	5.35	14.675	2.74	2.5
Second "	808	21.09	5.36	15.212	2.78	2.6
Third "	....	22.09	5.37	15.230	2.80	2.7

INFANTRY SOLDIERS—AVERAGE FOR TWO YEARS

Period of Examination	Number of Conscripts Examined	Height	Weight	Chest	Expansion
		Shaku	*Kan*	*Shaku*	
First period	....	5.29	14.786	2.78	2.3
Second "	....	5.305	15.326	2.82	2.4
Third "	....	5.32	15.453	2.835	2.45

PRIVATES OF MEDICAL CORPS—AVERAGE FOR TWO YEARS

Period of Examination	Number of Conscripts Examined	Height	Weight	Chest	Expansion
		Shaku	*Kan*	*Shaku*	
First period	....	5.35	14.665	2.73	2.4
Second "	....	5.36	15.244	2.775	2.55
Third "	....	5.37	15.217	2.78	2.65

INCREASE BETWEEN PERIODS

Period of Examination	Branch of Service	Height	Weight	Chest	Expansion
		Shaku	*Kan*	*Shaku*	
From first period to second	Infantry	.015	.540	.04	.1
From second period to third	Infantry	.015	.107	.015	.05
From first period to second	Medical Corps	.01	.579	.045	.15
From second period to third	Medical Corps	.01	.027	.05	.1

We shall gain nothing in the comparison of the height, weight, etc., of each different period. But the increase between periods, as shown above, should be noted.

During the time that extends from the first to the second period, medical privates, as well as infantry soldiers, receive the same military training, and their duties are also almost alike. But during the time between the second and the third period, a differentiation takes place between these two classes of soldiers, the medicals engaging in nonmilitary work. When we now examine the stature in each period, we find that the increase is .015 with infantry soldiers, while it is .01 with medical privates. The latter are, even at the time of enrollment, taller than the former, by .06, and, consequently, they do not grow in stature so much as infantry soldiers after enrollment. The increase of chest during the time between the first and the second period is .04 with infantry soldiers, while that of medical privates is .045. This is but natural. Against the 2.78 *shaku*[1] chest measure of infantry soldiers, that of medical privates is .05 less at the time of enrollment. This shows that the latter have still room left in which to grow. There is nothing remarkable in all these comparisons. But when we find the chest increase is only .05 with medical privates, against .15 with infantry soldiers, during the

[1] One *shaku* = .994 foot.

time between the second and the third period, we must be struck with the poor results in the case of the former. With regard to weight, the difference between them in the first half of their term is very slight, but in the second half the increase is .107 with infantry soldiers, while the rate with medical privates is .027.

We have nothing to say about expansion. In short, there is no doubt that the difference of physical development between infantry soldiers and medical privates is considerable, after their differentiation in training and duties. Let us again look at the statistics for 1910, in which all contingent elements were, it seems, eliminated according to the law of large numbers. There we find that infantry soldiers have an increase of .115 in weight during the time between the second and the third period, while medical privates have a decrease of .073 in their weight and of .01 in their chest measure during the same length of time.

It is stated above that we can not treat the development of students' physique in the same manner as that of the soldiers. The following table will, however, be a side light in our investigation:

PHYSIQUE OF STUDENTS IN SCHOOLS UNDER DIRECT CONTROL OF THE EDUCATIONAL DEPARTMENT[1]

Age	Period of Examination	Number of Students Examined	Height	Weight	Chest
			Shaku	*Kan*	*Shaku*
21	Corresponds to first period of conscripts	3,099	5.34	14.400	2.69
22	Corresponds to second period of conscripts	3,447	5.37	14.453	2.71
23	Corresponds to third period of conscripts	3,026	5.35	14.400	2.69

The figures for each period above are not those of the same persons, as is the case with conscripts. But we can get an idea of the general tendency of the development of students' physique. This table shows that students above the age of twenty-one make no improvement in physique. Compare

[1] *Educational Department Annual Report*, 1911.

the student life, with no improvement in physique, with the military life, in which there is a certain increase of weight and chest, and we can see clearly the good effects of military training.

Let us next compare the common soldiers with the sewing and cobbling privates. The latter are also selected and enrolled according to the same standards as the former and live under the same conditions as the former. But they engage in work that is quite nonmilitary. No statistics of their physique are published, the only material being the statistics of the sick patients among soldiers.

PATIENTS OF DIFFERENT CLASSES IN BARRACKS AND HOSPITALS, 1910

Class	Average Number Per Day	New Patients in Barracks	New Patients in Hospitals	Total of New Patients
Noncommissioned officers of different branches	11,005	4,912	1,154	6,066
Those of Account Department	115	14	10	24
Those of Health Department	282	24	34	58
Higher privates	20,730	11,924	216	14,085
Higher sewing and cobbling privates	44	33	5	38
Higher medical privates	1,404	195	148	343
First and second class soldiers	133,832	97,983	19,086	117,069
First and second class sewers and cobblers	171	156	23	179
First class medicals	1,917	638	234	872

PATIENTS OF DIFFERENT CLASSES IN BARRACKS AND HOSPITALS PER 1,000 MEN, 1910

Class	New Patients in Barracks	New Patients in Hospitals	Total
Noncommissioned officers of different branches	446	105	551
Those of Account Department	90	65	155
Those of Health Department	85	121	206
Higher privates	575	104	679
Higher sewing and cobbling privates	750	114	864
Higher medical privates	139	105	244
First and second class soldiers	732	143	875
First and second class sewers and cobblers	912	135	1,074
First class medicals	333	122	455

Since the noncommissioned officers of different branches of the army are under better sanitary conditions than higher privates, and the latter are under better sanitary conditions than first and second class soldiers, the percentage of new patients is larger among common soldiers and smaller among the officers. We have now to compare the classes on an equal footing with each other. Higher privates have 679 new patients per 1,000, while higher sewing and cobbling privates have 864 per 1,000. First and second class soldiers have 875, while first and second class sewers and cobblers have 1,047. From this comparison, we can see that the sewers and cobblers who engage in productive work like the common mechanics, have not the advantage of healthful working conditions as the common soldiers, who are under strict military discipline. Leaving out of consideration agricultural, stock farming, and fishing laborers, the mechanics in cities engage in unhealthy businesses, similar to the sewers and cobblers in the army. Now, when we consider the fact that the system of conscription takes these common mechanics away from cities, and gives them two or three years' training, we can not but admit the wholesome effect of such a training upon the development of their physique.

Conclusion

We have seen that the military life is conducive to the improvement of character, gives to the illiterates who are enrolled a knowledge necessary for livelihood and contributes to the cultivation of physical strength. We can not doubt that all these good results gained while in the army will remain when the soldiers are discharged and enhance the efficiency of their labor. The system of conscription also has an indirect effect upon the physical development of the people. Men of conscript age receive a preparatory training before the examination and enrollment. The officials of villages and towns call out those who will be of age in about six months, and give them a preparatory examination. If there are found among them cases of syphilis or trachoma they are required to

take necessary steps for remedy, the negligence of which is often visited with punishment. Such measures as these will be of much help in the prevention of the spread of such diseases and will contribute to the improvement of physique. The officials also take every possible measure to prevent sickness among those who have passed the conscript examination, so that there will be no cases of sickness among them at the time of enlistment. The Discharged Soldiers' Association and its branches attend to meetings of various sorts, in which conscripts are given preparatory lessons. In the evening (for such meetings are usually held in the evening) they gather together, and receive instruction in various military rules and their exposition. They are often required to attend military drill. As they want to alleviate difficulties after enrollment, they try hard to learn these preparatory lessons. Such preparatory measures as the above will no doubt reflect upon the efficiency of their labor, after their discharge.

Number of Laborers

Rate of Productive Laborers Among Those Enrolled in Active Service

The system of conscription has a great effect upon the number of laborers, because it takes many of the able bodied laborers away from their work. But the actual number of the productive laborers enrolled in the service is difficult to learn because statistics of the distribution of trades among those enrolled are entirely lacking. We can, however, obtain some estimate of their rate from other sources. In the present state of our society, those who have completed the elementary course alone can hardly engage in any occupation requiring brain work, but go into productive trades that require physical strength. Of course, wealthy people need not engage in such trades, even when possessed of the same grade of education and, besides, they are usually far advanced in their education.

Those who have completed the middle school course, or those of the same grade, usually live by brain work. Of these, however, there are some who have completed technical courses of some kind and engage in productive labor, but their number is comparatively so small that we may overlook them, for the time being. By productive laborers, we mean those who by the exercise of their own bodily strength engage in the production of goods. We exclude from this class such as engage in office work, or such as are superintendents of laborers.

Taking our stand upon the above premises, we believe we may go a step further and estimate the number of conscripts who previous to their enrollment in the active service were engaged in productive labor. In order to do this, the amount of their education must be known, which we deduce from that of the first class conscripts.

PERCENTAGE OF CONSCRIPTS HAVING EDUCATION OF ELEMENTARY GRADE, WHO PASSED THE CONSCRIPT EXAMINATION, TO MEN OF CONSCRIPT AGE 1910

	Conscripts	First Class	Second Class		Third Class	Fourth Class	Fifth Class	Average
			A	B				
A	University graduates	0.09	0.29	0.63	0.72	0.23	0.12	0.36
B	Those on equal standing with above	0.06	0.22	0.46	0.53	0.17	....	0.26
C	College graduates	0.21	0.44	0.85	0.92	0.32	0.36	0.52
D	Those on equal standing with above	0.28	0.53	1.04	0.80	0.30	0.36	0.55
E	Those completing middle school course	1.73	2.27	3.66	3.00	2.38	3.50	2.45
F	Those on equal footing with above	2.13	2.79	4.14	2.72	1.62	4.46	2.63
G	Those completing higher elementary course	22.18	21.48	21.98	15.71	11.84	19.06	19.64
H	Those on equal footing with above	12.31	11.72	11.48	11.52	7.92	11.82	11.63
I	Those completing ordinary elementary course	33.95	33.40	30.29	31.51	30.32	30.40	32.50
J	Those on equal footing with above	12.14	10.76	11.84	13.98	12.64	11.94	12.40
K	Those having some knowledge of reading and arithmetic	11.92	13.00	10.83	14.15	16.69	14.36	12.85
L	Illiterates	3.00	3.10	2.80	4.44	15.57	3.62	4.17
	Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00

PERCENTAGE OF CONSCRIPTS HAVING EDUCATION OF ELEMENTARY GRADE, WHO PASSED THE CONSCRIPT EXAMINATION, TO MEN OF CONSCRIPT AGE 1909

Conscripts	First Class	Second Class		Third Class	Fourth Class	Fifth Class	Average
		A	B				
A	0.05	0.11	0.18	0.26	0.35	0.03	0.14
B	0.08	0.19	0.28	0.34	0.32	0.12	0.19
C	0.04	0.11	0.16	0.20	0.23	0.04	0.11
D	0.09	0.17	0.19	0.28	0.31	0.12	0.17
E	1.56	2.02	2.65	2.68	3.03	2.40	2.14
F	2.00	2.41	2.76	2.40	2.35	2.43	2.29
G	21.50	20.98	20.29	15.97	13.55	18.88	19.49
H	10.04	9.36	8.49	8.11	6.83	8.34	9.06
I	43.68	43.84	41.17	41.52	36.97	41.99	42.25
J	6.95	6.96	6.66	7.93	7.48	8.18	7.17
K	10.56	10.95	12.70	14.24	14.75	11.90	12.01
L	3.45	3.90	4.47	6.07	13.83	5.57	4.98
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00

According to the two tables above, the total number of those conscripts above the middle school grade is 5.04 per cent of the total number of all the conscripts of different grades, in 1909, and 6.77 per cent, in 1910. But since the number of those conscripts who pass the examination becomes less as the grade of education becomes higher, and accordingly since the number of the conscripts to be enlisted in the active service grows smaller among those of higher grades of education, the percentage of those actives above the middle school grade must be below the 5.04 per cent or the 6.77 per cent of the total number of actives of different grades. Now, when we examine the number of the first class conscripts who pass the examination every year, we find it is about double the required number. Of course, in such a regimental district as Osaka, in which a great city like Osaka is situated, the number of the first class conscripts is not sufficient to fill the required number of actives. But this we may regard as an exception. As a rule, there is no necessity of enrolling the second class conscripts. Such being the case, in order to obtain the percentage of the actives above the middle school grade to the total number of the actives of all grades, we must obtain the percentage of the first class conscripts above the said grade who have passed the examination, to the total

number of all the first class conscripts. Of course, we must make allowances for the fact that those favored with the privilege of postponement of enrollment are called out at the expiration of the term of postponement without the drawing of lots. But the majority of such conscripts are above the higher school grade, and their percentage is as small as 1 per cent of the total number of conscripts. We may well overlook such a circumstance, for the time being.

Now to return to the two tables above. According to those tables, the percentage of the first class conscripts above the middle school grade was only 3.82 per cent in 1909, and 4.50 per cent in 1910. To go still further back, it was 3.82 per cent in 1908, and 4.54 per cent in 1907. The average for these four years was about 4.42 per cent. In recent years, the number of conscripts above the middle school grade ought to have had more or less of an increase. But our inference from the said average of percentage would be that the percentage at present will be about 5 per cent. Now, even supposing that the conscripts of the second class A are, as a rule, enrolled in the active service, there is still no necessity for changing the percentage of 5 per cent. The percentage of the second class B above the middle school, who have passed the examination, was 6.54 per cent in 1910, 5 per cent in 1909, 5.17 per cent in 1908, and 6.41 per cent in 1907. Putting these percentages with those of the first class conscripts above, and assigning their relative value (the number of the first class conscripts is about double that of the second class conscripts), we get the following averages: 5.18 per cent in 1910, 4.22 per cent in 1909, 4.27 per cent in 1908, and 5.16 per cent in 1907. The average for these four years is about 4.71 per cent. Hence our estimate of 5 per cent is nearly correct.

Taking the basis for our investigation upon the foregoing premises, let us now make an estimate of the number of productive laborers among those in the active service, but we have first to know the total number of the men below non-commissioned officers in the active service. The actual

number, however, is not published. We have, therefore, to go to the average number of men per day, as published in the Health Section of the *Military Department Annual Report.*

The figures for several years in the report are as follows:

Year	Men Above Semi-officers	Noncommissioned Officers and Common Soldiers	Men of Special Offices and Schools	Total
1907	12,400	173,712	4,831	190,943
1908	12,269	197,898	5,540	215,707
1909	12,326	207,957	5,408	225,691
1910	12,640	212,824	5,594	231,058

The number of 231,058 in 1910 nearly accords with that referred to in the American *Army and Navy Magazine.* The Military Club Report quotes the following from that magazine:

Infantry	149,402	Cavalry	14,585
Field Artillery	18,918	Foot Artillery	?
Coast Artillery	6,889	Expert Soldiers	16,727
Commissariats	11,427	Health Dept.	3,484
	Total	221,432 plus X	

Roughly estimated, the total is 230,000, which may be increased to 1,228,000 after the mobilization in war time.[1] From this total, 230,000, we must now subtract the number of men above semi-officers, which is 15,156 (of which those belonging to troops are 12,640, and those of special offices and schools 2,516). The balance is 214,502. From this number, we have again to subtract 14,770 noncommissioned officers. The balance is then 199,780. We may regard this number as that of the men enrolled, according to the system of conscription; that is, the number of actives is about two hundred thousand. But we must not forget that this is the average per day, and, therefore, that the actual number will be greater than that, if we take into our estimate the number of the different auxiliaries, who are enrolled only for a short time. The average of 200,000 per day is, however,

[1] American *Army and Navy Magazine*, May 20, 1911.

sufficient for our purpose. If we suppose that 5 per cent of this number engage in brain work after they are discharged, then their number would be ten thousand. The balance, one hundred and ninety thousand, must engage in productive labor, after being discharged. Add to this the 14,770 non-commissioned officers who would have to engage in productive labor, if they had stayed at home. The military life then takes some 205,000 men out of productive labor, in order to have them engage in such nonproductive work as military drill.

When we turn our attention to the navy, we find that the total noncommissioned officers and sailors, according to statistics prepared at the end of 1911, is 45,576, of which 9,996 are officers. As half of the sailors are taken from volunteers, 17,790 of them (half of 35,580) should be regarded as conscripts. Suppose we subtract from this number the 5 per cent who would have engaged in brain work, if not enrolled. The total of the naval conscripts would still be some 22,000, for the number of noncommissioned officers, picked from among the conscripts, is about half of the total number of noncommissioned officers. Adding the figures 22,000 to those of the army, we get 227,000, which is the total number of men taken from productive labor.

Loss of Labor Days

We have seen above that the number of those who live in barracks the whole year and are deprived of their productive labor is 227,000. If we wish to know how many labor days are lost to the nation, the answer is quite simple. They are equal to 227,000 multiplied by the number of labor days per man per year, not counting holidays. The total would be 82,855,000. But there are other circumstances to be considered.

Article XVI of the Conscription Law now in force runs as follows: "Reserves and Supplementaries are called out in cases of war or other emergency." In peace time, they are called out for military exercises, for a period not exceeding sixty days every year. They are called out for military

inspection once every year. According to this article, they must be called out every year for military exercises, but, actually, this does not take place, on account of the expense that would be entailed. The annual appropriations of the Military Department for such exercises are about two million *yen* (1,949,575 *yen* in 1912, 1,847,533 *yen* in 1911, 2,137,933 *yen* in 1910, 2,094,401 *yen* in 1909). But this sum is not sufficient to pay such expenses for all the reserves and supplementaries. As a rule, the appropriations are distributed among the different divisions, each of which calls out the men as far as it can with the funds available. Setting aside the special manoeuvers that take place every year in different districts, the number of the reserves and supplementaries called out every year is only a fraction of the total.

Also their annual number is not uniform, because the apportioned amount is not. A rough estimate of the amount is about 40,000 *yen* per division. We are not able, therefore, to make any estimate of the number of such reserves and supplementaries that will hold good throughout all the divisions. In a certain regimental district, the number was 1,960 in 1910, and 1,600 in 1911, from which we infer that the annual number of each regimental district is 1,800 or so. This inference seems to be based upon too little material, but we have no other proper way to get the required number. But when we see that the number of soldiers of each regimental district is about the same, our inference is not necessarily out of place. Basing our investigation upon the estimate of 1,800, we find that the approximate number of all the reserves and supplementaries that are called out every year is equal to 1,800 multiplied by 72, which is the number of regimental districts. In other words, the annual number is 129,600, that is, 130,000, roughly estimated. But we shall see that this annual number is larger, actually, when we take into consideration the fact that in some regimental districts the reserves and supplementaries of the Imperial Guard Division are called out together with those of other divisions, and, therefore, their annual number exceeds 1,800, which is our

estimate. Besides, these figures are of those regimental districts that do not participate in the special grand manoeuvers. The figures will be greater for the regimental districts that participate in these manoeuvers. Taking all these circumstances into account, we shall not be too far from the truth when we say that the annual total does not exceed 140,000. Now, these 140,000 soldiers must serve in the army for at least three weeks every year. Setting aside the number of the days that are spent in the preparations and trips, the number of labor days lost will reach 2,940,000 or more. The time for the calling out is not fixed, but it takes place during the term that extends through September, October and November, which is the harvest season. The season may not be the busiest season for farmers, but it is not a leisure season by any means. This loss of labor days is equal to the loss of the labor of 365 days for 8,000 laborers. In this is not included the loss on the part of the naval reserves and supplementaries.

Summary

From the above, it follows that the system of conscription has a good effect upon the quality of labor, while it has a bad effect upon its quantity. Of these contradicting effects, we are not able to determine which is the more far reaching. We can not make any quantitative estimate of the difference. And there may naturally be room enough for disputes. The military authorities emphasize the good effects upon the quality of labor, as a set-off to the loss of productive labor. But any one who looks into the matter without bias, will admit that the effects upon the quality is not sufficient to compensate the loss of labor days. We can not, of course, deny that the military life increases the efficiency of labor. But this is a slight matter after all. That hundreds of thousands of able bodied laborers are taken from productive work must be a great loss in the national economy, so far as there is opportunity for employment. Whether there is such opportunity is our next question.

CHAPTER VI

EFFECTS ON PRODUCTIVITY

The effects of the system of conscription upon employment and labor were studied in the preceding chapters. This alone, however, would not be sufficient for an accurate knowledge of its effects upon productivity. The fact that military life takes away many able bodied men from productive labor will not justify us in thinking that so much of the productive power of a nation is thereby lost. For, there may be a limit to the amount of employment which may cause among discharged soldiers various difficulties in the gaining of their livelihood. Even admitting that the conscription system gives rise to certain employment, as we have already seen to be the case, this does not necessarily mean the increase of employment among the people at large. We must know whether or not those who get their livelihood because of the army have some other means of getting employment, even in a case where there is no such system as that of conscription. It is necessary for us to investigate the conditions in which labor and employment go hand in hand. In other words, we must see whether or not those who get their means of subsistence from and in the army would be able to find employment outside the army, and without depriving others of their employment.

Agriculture

Let us now see how far labor and employment are in accord with each other; how far our agriculture is able to furnish labor with employment.

Tendency Among Agricultural Laborers to Concentrate in Cities

The concentration of agricultural laborers in cities is a phenomenon common to all civilized nations, and this is now the case with our nation. Of course, this tendency throughout

all the nations is not peculiar to the present age, but the feature that is new to the present age is its assuming an unhealthy character. And this unhealthy character of the tendency is now being realized in our country as in other countries.

PERCENTAGE OF INHABITANTS IN VARIOUS CITIES, TOWNS AND VILLAGES TO THE WHOLE POPULATION

Cities, Towns and Villages	1894	1895	1896	1897	1898	1903	1908
Below 500 Inhabitants	....	....	....	....	0.44	0.23	0.12
500–2,000 "	....	....	....	....	13.20	9.57	7.30
2,000–5,000 "	....	....	....	....	53.80	51.80	46.91
5,000–10,000 "	....	....	....	....	14.92	17.70	20.75
10,000–20,000 "	4.11	4.08	4.22	3.91	4.39	5.11	6.93
20,000–50,000 "	3.54	3.78	3.60	3.56	3.85	4.16	4.68
50,000–100,000 "	1.98	1.74	1.85	1.97	1.70	2.22	2.61
100,000–200,000 "	0.74	0.99	1.07	1.12	0.93	0.77	1.03
200,000–300,000 "	0.48	0.49	0.55	0.57	1.01	1.18	0
300,000–400,000 "	0.76	0.78	0.77	0.75	0.78	1.46	2.22
400,000–500,000 "	1.14	1.11	0	0	0	0	0.86
Above 500,000 "	2.89	2.90	4.08	4.68	4.98	5.80	6.59
Total (below 10,000)	84.36	84.31	83.56	83.44	82.36	79.30	75.08
" (above 10,000)	15.64	15.87	16.14	16.56	17.64	20.70	24.92

City censuses for the ten years preceding 1908, except for 1898 and 1903, and for the years since 1908 have not been published. The towns and villages possessing a population above 10,000 are, with a few exceptions, the local centers of commerce and manufactures, and their life is similar to city life. Those of less than 10,000 inhabitants, except a few that are manufacturing and commercial, are agricultural in character. Such being the case, if the percentage of the inhabitants in cities and towns above 10,000 is found to be on the increase, and if the percentage of those in towns and villages below 10,000 is found to be on the decrease, then this is evidence that a concentration of population in cities is taking place. As the birth rates of cities are lower than those of the country, and death rates are higher in the former than in the latter, even the very fact that the percentage of increase is stationary is an evidence of concentration. And

this is more evident when there is a gradual increase of the percentage in cities. According to the table above, the percentage of the towns and villages below 10,000 decreased gradually from 84.36 to 75.08 in the fourteen years from 1894 to 1908, and the rate of decrease was greater in the years following 1900. On the contrary, the percentage of the towns and villages above 10,000 increased gradually from 15.64 to 24.9. Judging from these figures, we must say that concentration is an actual fact, and that the rate of increase has been especially great since 1900. We also recognize the fact that the rate was great during the two years 1909 and 1910, when the price of rice was very low, but the statistics for these years are not obtainable.

This fact of concentration may indicate an excess of agricultural people, but is not conclusive evidence of the excess. Of course, it is often the case that agricultural people move to cities when their farms no longer yield sufficient for their support. But this is by no means the only reason for their removal. The farms may be enough for their support, but the trades and occupations in cities may give them more return than those in the country. And this is often the case. It is but natural that many are attracted to the cities, and this is true of all the civilized nations. Many a farm is deserted, because many a tiller leaves his home for the city. That people can get a better living in cities than in the country may account for concentration, but does not necessarily mean an excess of agricultural people. In other words, we must go a step further, if we want to ascertain the relation between the concentration in cities and the excess in the country. This is a problem of great importance to us.

Area of Cultivated Fields

Our task now is to study the area of arable land, in order to see whether or not the concentration in cities is due to an excess of agricultural people. Before proceeding any further, let us bear in mind that the phrase "excess of agricultural laborers" carries with it two meanings. On the one hand, it

means that the area of the arable land is not sufficient for the whole labor of agricultural people, and, on the other, that the area is either not sufficient for giving employment to all of the agricultural population, or is barely sufficient for doing so. The former relates to a physical comparison between the arable land and man's labor; the latter, to a social and economic comparison between the profits derived from the arable land and the number of people.

A comparison of the areas of the cultivated fields of the last sixteen or seventeen years would be of much value. That the Russo-Japanese War (1904–1905) took away about one million men from among the people is suggestive of its effects upon agricultural labor. Seeing that this war dealt no blow to the rice crops, in spite of the fact that it deprived our agricultural labor of the most able-bodied men, the conclusion is reached that this is an evidence of an excess of agricultural population, that is a physical excess in the comparison between labor and land. They contend that the number at least of those taken to the battlefields is not necessary to agriculture. This contention is not altogether groundless. The following table shows the areas of rice fields for more than a decade:

Year	Area of Rice Fields *Cho*	Comparison with Previous Year
1897	2,845,339.4	+ 52,840.4
1898	2,836,036.7	− 9,303.0
1899	2,839,550.2	+ 3,513.5
1900	2,828,459.9	− 11,090.3
1901	2,847,357.3	+ 18,897.4
1902	2,847,191.9	− 165.4
1903	2,864,139.1	+ 16,947.2
1904	2,880,714.9	+ 16,575.8
1905	2,881,548.5	+ 833.6
1906	2,898,792.9	+ 17,244.4
1907	2,906,091.9	+ 7,299.0
1908	2,922,387.8	+ 16,295.9
1909	2,938,073.8	+ 15,686.0

The area in 1904 and in 1905 did not decrease, but rather increased to a certain extent in the same manner as in the year preceding and following them. As to the deficiency of

labor in these two years, we are unable to get any clear evidence from rice crops. We can only draw an indirect inference. The average of rice crops per *cho* in the successive years was as follows:

Year	Rice Raised on Wet Fields	Glutinous Rice	Rice Raised on Dry Fields	Average
	Koku	*Koku*	*Koku*	*Koku*
1897	1.209	1.076	0.706	1.185
1898	1.720	1.530	0.920	1.681
1899	1.430	1.310	0.770	1.400
1900	1.497	1.343	0.875	1.466
1901	1.686	1.513	0.902	1.648
1902	1.328	1.185	0.721	1.297
1903	1.665	1.498	0.768	1.628
1904	1.834	1.653	0.704	1.785
1905	1.353	1.200	0.791	1.325
1906	1.632	1.465	0.901	1.597
1907	1.722	1.558	1.012	1.688
1908	1.815	1.638	1.054	1.777
1909	1.823	1.665	1.021	1.785

As rice crops are controlled to a large extent by conditions of weather, it is difficult to ascertain the amount of labor from them alone. In 1904, there was a good harvest, from which we judge that the labor was also sufficient. The bad harvest in 1905 was not the worst in history. Besides, if this bad harvest was due to the deficiency of labor, the harvests in all of the provinces would have been uniformly bad, which was not the case. Of the deficit in that year's harvest, 6,000,000 *koku* (compared with the average of the preceding years), 75 per cent, is credited to the nine northeastern provinces —Fukushima, Miyagi, Iwate, Aomori, Yamagata, Akita, Niigata, Ibaraki and Tochigi. Such provinces as Shizuoka, Tokushima, Kagawa, Oita, Wakayama, Shiga and Ehime had all harvest increases of from 30,000 *koku* to 80,000 *koku*. Therefore, we can not attribute the harvest decrease in 1905 to deficiency of labor. We shall find the same fact when we consider the areas of wheat, including barley and naked barley fields.

	Cho
1897	1,749,571.7
1898	1,806,667.4
1899	1,809,822.6
1900	1,806,668.6
1901	1,816,200.8
1902	1,804,938.0
1903	1,799,346.1
1904	1,800,393.0
1905	1,817,522.4
1906	1,813,913.1
1907	1,797,447.6
1908	1,782,401.2
1909	1,771,855.6
1910	1,765,176.8

In 1904 and 1905 we have a remarkable increase in the area, and the year 1905 has no equal in this respect in the year preceding or following it in which we have nothing that indicates a deficiency of labor. As to the yield of wheat, we shall say nothing, because we can make no definite statement, as in the case of rice crops. At any rate, our investigation so far seems to justify the contention referred to at the beginning of this clause.[1] At least, there seems to be no positive evidence against the contention. But it is, to our mind, based upon an imperfect observation of the matter. Rice and wheat are the most important agricultural products of our country, and the greater part of the income of our agricultural people depends upon them. Even supposing that there are some cases in which they are in want of labor, we can hardly believe that they would reduce the area of their rice or wheat fields on that account. Is it not very natural that in such cases they would try to meet the deficiency of labor by reducing the labor for transplanting other grains of lesser importance, so that there may be sufficient harvests of rice and wheat? If we want to know whether labor was deficient or not during the Russo-Japanese War, we must go a step further, and ascertain the area of the fields of some other agricultural products. The total area of the fields devoted to the eight important food products,[2] except rice, and of the five other products[3] is as follows:

[1] We understand that the authorities of the Commercial and Agricultural Department are of the same opinion.

[2] Wheat, beans, red beans, millet, sorghum, buckwheat, potatoes and sweet potatoes.

[3] Cotton, hemp, indigo, tobacco, and rape seed.

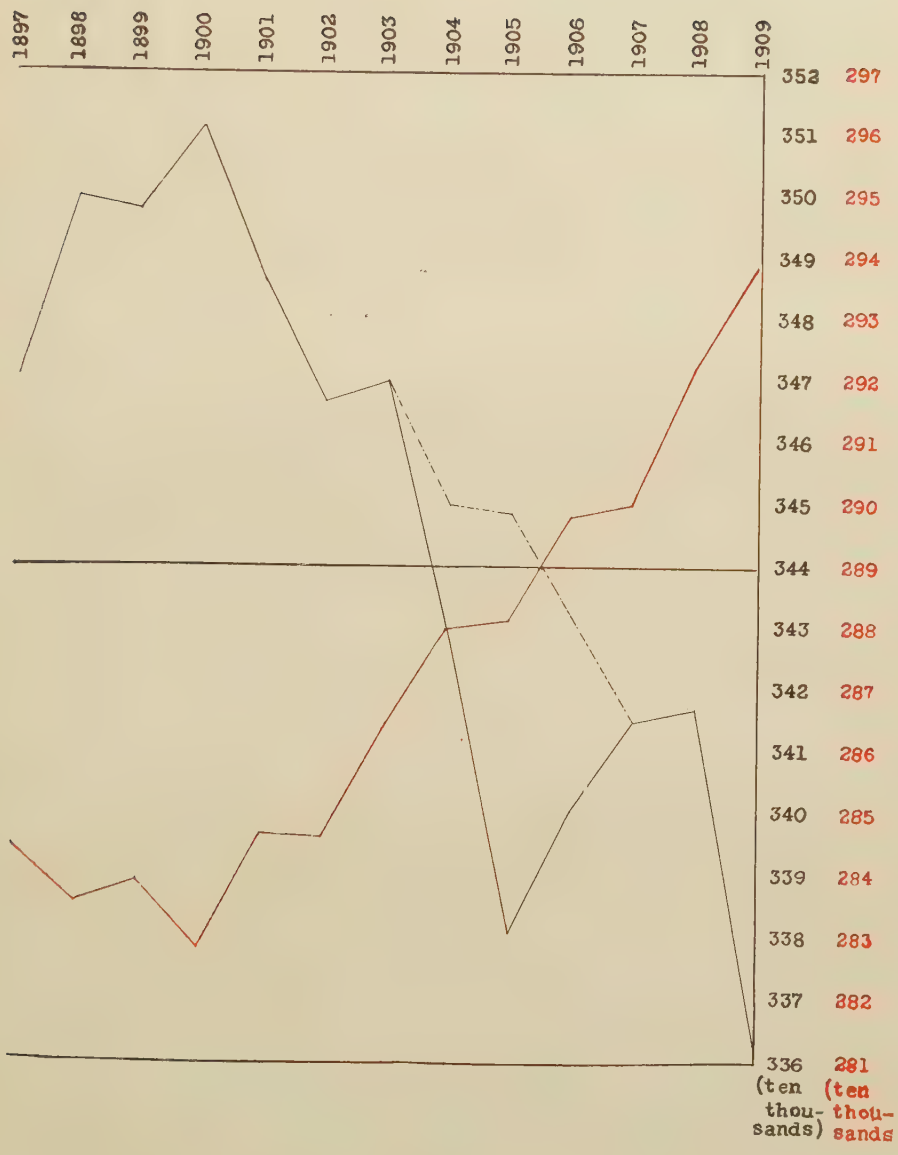
Year	Total *Cho*	Year	Total *Cho*
1897	3,469,634.5	1904	3,428,424.8
1898	3,499,687.1	1905	3,380,619.8
1899	3,497,702.0	1906	3,404,629.9
1900	3,511,555.1	1907	3,415,313.0
1901	3,485,976.7	1908	3,417,140.0
1902	3,466,709.6	1909	3,363,369.9
1903	3,470,277.0		

We shall find a very interesting relation between these figures and the area of cultivated rice fields, in the accompanying diagram.

Let the red line denote the area of rice fields, and the black that of the other important products. We shall perceive that there exists a constant relation between the two lines. The diagram shows that they run symmetrically from the horizontal line in the center. The fluctuation of one corresponds to that of the other. There was some irregularity in this relation in 1904, 1905 and 1906 only. If these existed in the same regular relation in these three years as in other years, the black curved line would have run the dotted course. There is no other reason than the war that will account for the irregularity in the said years.

To express the same thing in another way, the area of rice fields and that of other fields were constant in the successive years. But we find that the total of the area of these two kinds of fields falls short of the usual figures, despite the increase in the area of rice fields. This shows that there was a decrease in the area of the fields other than rice fields, and the difference is due to the deficiency of labor, caused by the departure of able-bodied laborers for the front. Below we give the total area of fields in the successive years:

Year	Total *Cho*	Year	Total *Cho*
1897	6,314,973.9	1904	6,309,139.1
1898	6,337,252.2	1905	6,262,168.1
1899	6,335,723.8	1906	6,303,422.8
1900	6,340,015.0	1907	6,321,404.9
1901	6,333,334.0	1908	6,339,527.8
1902	6,313,901.5	1909	6,301,443.7
1903	6,334,416.1		


1897
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339 284
338 283
337 282
336 281
(ten thou-sands)
(ten thou-sands

Except the figures for 1909, those of other years make 6,330,000 *cho* their basis, the fluctuation being not more than 15,000 *cho*. But the decrease in the three years of the war was too irregular, and, especially, that in 1905 was only 60,000 or 70,000 *cho*, as compared with the average for the preceding years.

Let us go a step further, and ask, why is the annual area of fields almost stationary? It is not because the area of arable land is settled and has all been utilized for cultivation, so that there is no more room for increase. On the contrary, there was a remarkable increase in the area.[1] There are certain reasons by which we recognize the constancy of the number of agricultural laborers, despite the increase of the area.[2] On the strength of these reasons, we may say as follows: We may regard the quantity of labor that is necessary for the cultivation of one *cho* of rice field or other fields as nearly fixed. Therefore, there is no way other than by cultivating the same area, even though there is an increase of the area of arable land. Since they have used their labor to its furthest limit, they can not take care of the increased area. However, such an explanation of the matter is not entirely free from difficulties. Assuming that about half the number of soldiers at the front are agricultural laborers, their number would have been at least 400,000, to which about 600,000 more must be added who were enlisted in rear service. The loss of men from agricultural labor would thus have been about one million. If now we suppose that they would have devoted their whole energy to their work in the fields which amounted, as we have seen, to 6,300,000 *cho*, why did the loss of at least 300,000 or 400,000 of them in 1905 result in the small decrease of 60,000 or 70,000 *cho* in the area of the cultivated land?

The only explanation now remaining for us would be that there would be no change in the quantity of labor per *cho*, in usual times, for there is a certain limit to the quantity of

[1] *Infra*, p. 169.
[2] *Ibid.*

labor, owing to certain customs among Japanese agricultural people. So far as there is no increase in the number of men, the area of cultivated land would remain the same, despite the increase of arable land. The increase of rice fields would then mean the decrease of other fields. Now, about 400,000 men were taken to the front in the war and those who remained at home had to forego their customary labor limitations. Even children, women and old people, who remain at home in usual times, were compelled to go to the fields. The result was the small decrease of 60,000 or 70,000 *cho*.

If we indorse such an explanation as this, our conclusion would be that Japanese agricultural laborers are in excess, in the physical sense; that is, there would be a lack of arable land if they devoted their whole energy and time to cultivation. The war took away at least 400,000 and still the deficiency of laborers was not more than 80,000.[1] Then, the number of all the reserves and supplementaries at the front, less 80,000 men, must be the excess, considered in their relation to the area of the arable land. If other laborers had devoted their whole energy to farming, they would have been unnecessary. The area of arable land has since increased considerably. But it would still be insufficient for calling forth the whole energy of the surplus number. Of the increase in the area, we shall see later.

Agricultural laborers are thus in excess, considered in their physical relation. But our problem is whether there is an economic surplus or not, whether or not our agriculture has any more room for employment. A physical surplus does not necessarily mean an economic surplus, for is it not a fact that our agricultural laborers, who were in excess physically, have been employed in some sort of farming work? Is the number of our farming people in excess economically? If not, to what extent is our agriculture still able to give employment to attract more laborers? For the answer we must go to the

[1] The total number of agricultural families is 5,400,000. Supposing the number of actual laborers per family to be one and a half persons, the total of the laborers will be 8,100,000. This number of laborers cultivate about 6,000,000 *cho*. Hence the number required for the cultivation of 60,000 *cho* is about 80,000.

materials other than the area of cultivated land. We can hardly go further than to draw mere inferences.

Fluctuation in the Area of Arable Land and in the Number of Agricultural Laborers

In order to see whether our agriculture has more room for employment, we must look at the fluctuation in the area of arable land. It is unfortunate that we can not gain access to the conditions previous to 1903.

Year	Wet Fields	Dry Fields	Total
	Cho	*Cho*	*Cho*
1904	2,818,276.3	2,476,584.2	5,294,860.5
1905	2,832,569.2	2,488,098.7	5,320,667.9
1906	2,840,308.1	2,497,400.7	5,337,708.8
1907	2,849,760.7	2,586,895.1	5,436,655.8
1908	2,873,562.1	2,630,761.4	5,504,323.5
1909	2,894,050.6	2,723,576.0	5,617,626.6
1910	2,902,189.4	2,750,473.2	5,652,662.6
1911	2,916,793.6	2,782,425.7	5,699,219.3
1912	2,932,832.0	2,826,278.2	5,759,110.2
Increase from 1904 to 1912	114,555.7	349,694.0	464,249.7

During these years, the increase in wet fields was some 100,000 and that in dry fields some 300,000. When we now look at the numbers of farming people during the same period, we find little increase.

Year	Number of Houses in Country	Number of Farmers' Houses	Number of Semi-farmers	Total Farmers	Percentage of Farmers to the Number of Houses	
					Farmers	Semi-farmers
1904	8,413,688	3,776,798	1,639,905	5,416,703	44.89	19.49
1905	8,486,772	3,759,163	1,620,806	5,379,969	44.29	19.10
1906	8,689,735	3,819,625	1,558,712	5,378,337	43.96	17.94
1907	8,730,259	3,778,250	1,627,922	5,406,172	43.51	18.56
1908	8,964,986	3,747,633	1,660,730	5,408,363	41.80	18.52
1909	9,084,710	3,702,558	1,706,941	5,409,499	40.76	18.79
1910	9,020,021	3,694,970	1,721,967	5,416,937	40.97	19.09
1911	9,245,253	3,682,344	1,739,782	5,422,126	39.83	18.82

Except 1905 and 1906, in which the effects of the war were remarkable, the total number of farmers' houses was 5,400,000 to 5,410,000, these figures remaining the same throughout;

from which we may infer that the figures preceding 1904 remained almost the same. Indeed the very fact that there was a decrease of about 80,000 in the number of farmers' houses, while there was an increase of about 80,000 in that of semi-farmers' houses, is a sufficient evidence of the decrease of those who had employment on farms alone. Some will think that if there be any decrease of agricultural employment, this should necessarily be in our own case, for we see that the number of cattle and horses for farming work has increased to some extent.

PERCENTAGE OF WET AND DRY FIELDS, FOR WHICH CATTLE AND HORSES ARE USED, AND OF THOSE FOR WHICH THEY ARE NOT USED

Year	Wet Fields		Dry Fields	
	Used	Not Used	Used	Not Used
1904	53.87	46.13	32.85	67.15
1905	53.78	46.22	32.31	67.69
1906	54.35	45.65	32.24	67.76
1907	55.62	44.38	34.11	65.89
1908	57.00	43.00	37.61	62.39
1909	57.28	42.72	33.61	66.39
1910	57.87	42.13	34.79	65.21

The area of arable land increased about 400,000, while there was little increase in that of cultivated land. As to the number of farmers' houses, there was not an increase but a slight decrease. This does not at all mean that there was an economic surplus, nor that there was no room for more employment. Even subtracting the area of 400,000 *cho*, which is the increase since 1904, from the area of arable land at present, the present number of farmers could gain their livelihood by using the balance of the area as they did before. But as the new increase of population left its own district for cities, in order to seek some better means of livelihood, there we find no increase in the number of farmers. On the other hand, there is an increase in the area of arable land, which means that the area per man is on the increase.

The increased area of 400,000 *cho* ought to give them more employment, though the standard of their living may thereby fall somewhat. Of the area of cultivated land, we shall find almost the same thing to be true. If the area of arable land already in existence in 1904 had been used in the same way as before, this alone would have caused an increase in the area of cultivated land, to the extent that it would have amounted to 6,330,000 *cho*. The area of arable land, 400,000 *cho*, is sufficient margin for additional increase of the area of cultivated land and can, therefore, give an additional increase of employment. The concentration of agricultural laborers in cities is by no means due to the fact that they can not find employment in the country. It is due to the fact that they want to find better means of livelihood in the cities. In the country there is still much employment left. Let us secure a rough estimate of the amount:

AREA OF ARABLE LAND PER FARMER

Year	Wet Fields	Dry Fields	Total
	Cho	*Cho*	*Cho*
1904	.5200	.4521	.9721
1905	.5218	.4606	.9824
1906	.5224	.4612	.9836
1907	.5224	.4724	.9948
1908	.5308	.4818	1.0126
1909	.5315	.5015	1.0330
1910	.5318	.5027	1.0345

The area per farmer is thus about one *cho*. Now, if we estimate the number of agricultural laborers per house to be one man and a half, the arable land of 400,000 *cho* would support at least 500,000 or 600,000 laborers. This estimate requires, however, some discount, because newly opened fields can not be considered on an equal footing with well cultivated fields. However, we have no means of knowing the amount to discount. But we believe we can say that however large may be the number of agricultural laborers, compared with the area of arable land, our farms ought to give more employment to the soldiers who are originally from the

laboring classes, and to about 300,000 of those who gain their livelihood by the employment connected with the army.

As we have included in the above the estimate of the increase of the area of wet and dry fields in Hokkaido, we now give it below separately, by way of parenthesis:

Year	Wet Fields	Dry Fields	Total
	Cho	*Cho*	*Cho*
1904	20,584.7	319,620.3	340,205.0
1905	21,402.3	341,962.3	363,364.6
1906	22,827.7	366,349.0	389,176.7
1907	24,637.0	403,337.9	427,974.9
1908	28,696.1	432,878.2	461,574.3
1909	36,432.5	481,455.1	517,887.6
1910	37,902.7	500,131.1	538,033.8
Increase from 1904 to 1910	17,318.0	180,510.8	197,828.8

Subtracting this amount from the estimate above (that is, total increase of the area of arable land) we get the increase of all the other parts of the country, from 1904 to 1910.

Wet Fields	Dry Fields	Total
66,733.1	93,371.0	160,104.1

If we add to this total that of 1911, the increase of the area would then be 180,000 *cho* at least. As we have already seen, the area per house is about one *cho*. Hence, the said total of the increase of the area would support 18,000 houses. On the other hand, there was, during these years, a decrease of about 35,000 houses against the area existing previous to these years. If we suppose that labor could be increased in the same degree as before, the area of arable land, except that in Hokkaido, would be enough to support 210,000 or 220,000 laborers. As to the area in Hokkaido, during the same period there should have been an increase of 100,000 or 110,000 houses, if we estimate the area per house to be about two *cho*. But this was not the case. The increase was only 36,000, which means that the area would still be able to support 60,000 or 70,000 more houses. In other words, the total of the increased area

ought to support at least 250,000 houses. Now, if we suppose that the average labor of adults per house is one man and a half, then the area would support 370,000 or 360,000 laborers.

INCREASE OF AGRICULTURAL HOUSES IN HOKKAIDO[a]

Year	Farmers	Semi-farmers	Total
1904	79,214	36,751	115,965
1905	81,697	33,816	115,513
1906	87,921	33,540	121,461
1907	96,377	34,311	130,688
1908	103,554	35,465	139,019
1909	103,809	43,611	147,420
1910	106,757	44,621	151,378
Increase	27,543	4,870	35,413

[a] Because there was an increase of 35,000 in Hokkaido, whose agricultural population is a part of the whole agricultural population, in which there was almost no change during the said years.

Let us now proceed still further, and see how much of the area of our land could yet be turned into wet and dry fields. According to an investigation made by a reliable authority, the estimate is as follows:[1]

AREA THAT COULD BE TURNED INTO WET FIELDS

	Cho
Increase as the result of the rearrangement of arable land[2]	36,000
Dry fields in interior to be turned into wet fields	250,000
Dry fields in Hokkaido to be turned into wet fields	100,000
Land in interior to be reclaimed	250,000
Land in Hokkaido to be reclaimed	100,000
Total	736,000

AREA THAT COULD BE TURNED INTO DRY FIELDS

Land to be reclaimed	500,000
Dry fields to be turned into wet fields	350,000
Balance	150,000

The above estimate is the safest and the least possible estimate. Of the whole area of the country, about 9,529,110 *cho* is regarded as arable, the maximum angle of slope being fifteen degrees. If we deduct from this area that of the land

[1] *Hokkaido Agricultural Association Report*, No. 4, Vol. XIX.

[2] The estimate is that there will be an increase of the 3 per cent of 1,213,000 *cho* of the land to be rearranged.

already cultivated, which amounts to 5,759,110 *cho*, the balance will be 3,769,902 *cho*. Of this area of arable land, it would not be very difficult to get about one million *cho* of wet and dry fields. Setting aside the circumstances in Korea and Formosa, the area will be enough for the support of all the soldiers in the army, and of all those who are getting their livelihood from the army.

Manufactures and Commerce

We will now study our commercial and industrial conditions There are persons prone to believe in the excess of labor, but we have already seen that even in our agriculture alone there is yet much room for labor. People leave the country for the cities, in spite of this fact, because the city life is more profitable than the life in the country. What we would lose by the military system would be made up by what we gain in the agricultural life. But is there, in our commerce and manufactures, any possibility of giving more employment, as we have seen to be possible in agriculture? The most valuable data for our study would be statistics of those who are not employed, but as there have yet been no statistics of the kind, we shall have to base our arguments upon indirect inferences from various observations.

Increase of City Population

In a preceding section, we have studied the concentration in cities. Our task now is to study the increase of the absolute city population for several years in succession. Assuming that the cities and towns above ten thousand population are industrial and commercial, and that towns and villages below that size are agricultural, let us, for the sake of convenience, call the former simply cities.

Until 1897, the yearly increase in cities was 200,000 or so, but, in 1898, the increase jumps to 650,000 or 660,000. We further find that this great increase went hand in hand with the increase of about 150,000,000 *yen*, for two years, in the total amount of imports and exports. The yearly increase of

INCREASE IN POPULATION OF CITIES

Cities and Towns	1894	1895	1896	1897	1898	1903	1908
Above 10,000 inhabitants....	1,769,489	1,782,128	1,862,832	1,748,260	2,025,173	2,481,266	3,586,200
" 20,000 "	1,522,399	1,651,550	1,590,649	1,586,942	1,747,670	2,021,193	2,422,981
" 50,000 "	855,174	760,665	816,626	880,275	772,481	1,077,058	1,352,565
" 100,000 "	319,432	431,397	471,381	496,979	423,490	374,720	530,916
" 200,000 "	206,742	215,083	242,085	252,699	459,925	573,641	....
" 300,000 "	328,411	340,101	341,101	332,374	353,139	706,603	1,150,731
" 400,000 "	488,937	487,184	....	....	....	....	442,462
" 500,000 "	1,242,224	1,268,930	1,803,631	2,086,631	2,261,356	2,814,600	3,412,726
Total.....	6,732,808	6,937,038	7,128,305	7,384,160	8,043,234	10,049,081	12,898,581
Increase over preceding column	....	204,230	191,267	255,855	659,074	2,005,847[a]	2,849,499[b]

[a] This is for a five-year period. The yearly increase would be 401,169.
[b] This is for a five-year period. The yearly increase would be 569,900.

city population, for about ten years, has since been about 500,000. As these figures include those of the cities formerly below 10,000, but now above 10,000, as the result of their slow increase, this estimate of 500,000 may be somewhat exaggerated. But even excluding such small towns from our estimate, the increase is at least 400,000.

Whether this increase of 400,000 may be due to the concentration of people from the country, or not, it must be due to the fact that people have found so many new employments. The number of inhabitants in the smaller towns and villages is also, to a certain extent, making a yearly increase.

	1898	1903	1908
Population in towns under 10,000	37,359,807	38,493,655	38,843,905
Increase in five years	....	1,133,848	350,250
Yearly increase	....	226,770	70,050

As we have seen in the previous section, there has been no increase in the number of farmers' houses in recent years. This increase of about seventy thousand must therefore be due to the increase of commercial and industrial employment. Assuming that one employment is sufficient for the support of five persons, the number of people who have employment in manufactures and commerce must be more than one hundred thousand. The fact that our commerce and manufactures can every year give employment to the laboring classes to this extent leads us to the conclusion that our commerce and manufactures are always demanding such laborers. This conclusion may cause surprise on the part of those who think that there is a great excess of labor in the country. The following will confirm our conclusion:

Wages of Laborers

If our commerce and manufactures are in trouble, because of the excess of labor, then the yearly increase of removals to cities would cause a decrease of wages. Especially would it cause loss of employment, which would cause decrease of wages among unskilled laborers. But wages have been going up for the last ten years. Even the wages of unskilled labor-

ers have been increasing, compared with the total average of prices, or with the price of rice, or with those stuffs that are used as substitutes for rice.[1]

INCREASE IN WAGES OF LABORERS IN COMPARISON WITH AVERAGE INCREASE IN PRICES OF FOODSTUFFS

Year	Total Average of Wages	Wages of Day Laborers	Wages of Men Servants	Total Average of Prices	Price of Rice	First Class Foodstuffs Except Rice
1900.....	100.0	100.0	100.0	100.0	100.0	100.0
1901.....	104.7	105.4	100.7	97.0	101.0	91.0
1902.....	107.7	105.4	100.4	97.0	107.0	100.0
1903.....	109.5	108.1	110.0	100.0	121.0	125.0
1904.....	107.5	108.1	111.9	108.0	114.0	132.0
1905.....	112.1	110.8	119.3	116.0	112.0	128.0
1906.....	118.4	113.5	122.5	114.0	128.0	118.0
1907.....	134.1	132.4	142.5	122.0	142.0	128.0
1908.....	143.0	143.2	149.6	122.0	135.0	124.0
1909.....	144.1	140.5	161.1	118.0	111.0	119.0
1910.....	148.5	143.2	168.7	120.0	114.0	122.0
1911.....	152.9	151.4	172.2	126.0	149.0	135.0
1912.....	157.2	156.8	175.2	133.0	180.0	168.0

The following table concerning the wages of day laborers in the different districts is of importance:

WAGES OF DAY LABORERS

Districts	1900			1912			Wages of Middle Class Laborers, in 1912[a]
	First Class	Second Class	Third Class	First Class	Second Class	Third Class	
Tokyo.....	50	45	40	68	65	60	144
Osaka.....	50	40	35	80	70	60	175
Kobe.....	70	60	40	70	65	60	108
Yokohama.....	45	40	35	70	65	60	163
Nagoya.....	..	40	..	..	70	..	175

[a] Supposing that of 1900 to be 100.

Generally speaking, this advance in the wages of unskilled laborers in cities is greater than that of the average of all other wages. Attention should be paid to the fact that the

[1] Report of the Commercial and Agricultural Department.

advance is greatest in the city of Osaka, which is the greatest of all the commercial and manufacturing cities of Japan. Our conclusion is, therefore, that the demand for labor is increasing, in spite of the fact that the greater commercial and manufacturing cities are attracting great numbers of laborers every year.

Percentage of Male and Female Operatives

The above conclusion is confirmed by the percentage of the operatives of different factories. There are now about 920,000 operatives in both government and private factories, of which over 500,000 are females. In textile factories female operatives are more numerous than male operatives, their number being 450,000 against 70,000 males. This is a phenomenon peculiar to our manufactures, there being no such condition in any other civilized nation. How came this peculiar fact into existence? This is rather surprising, when we see that the system of the family is quite strong and that female members who leave their family for works of various sorts are comparatively few. There is one circumstance that will explain the matter, and that is the lack of male labor. It is said that the factories that demand male operatives alone have difficulty in securing proper male operatives. This circumstance compels the different factories to employ female

OPERATIVES IN 1912[1]

Factories	Operatives			Coolies		
	Male	Female	Total	Male	Female	Total
Textile factories	66,904	446,283	513,187	9,653	4,199	13,852
Machine and tool factories	84,996	4,655	89,651	7,130	944	8,074
Chemical works	50,312	24,922	75,234	10,930	3,648	14,578
Food and drink factories	36,031	7,929	43,960	3,857	1,955	5,812
Miscellaneous works	43,306	23,037	66,343	5,179	1,742	6,921
Special works	66,681	8,321	75,002	82,528	32,953	115,481
Total	348,230	515,217	863,377	119,277	45,441	164,718
Factories conducted by government	114,335	161,553	275,888	6,879	616	7,495
Total	462,565	676,770	1,139,265	126,156	46,057	172,213

[1] Twenty-Ninth Statistical Report of the Department of Agriculture and Commerce.

operatives, if they can find some means of replacing male operatives with female. This they do, in spite of the greater amount of expense of securing the latter. If the number of the former were sufficient, why so much trouble and expense? Of course, the cheapness of female labor, considering its efficiency, may be one of the causes, but there is still no doubt that this is due to the lack of male labor.

Absorption of Labor after the Russo-Japanese War

In the consideration of agriculture, our first task was to examine the accessible facts, and so it must be with our consideration of manufactures and commerce. The number of the soldiers that were in the first line of the battle fields in the Russo-Japanese War was perhaps not more than 500,000, but the number of those who were in the second line was not less than 300,000. But if we add to these 800,000 all those who were engaged in various occupations at the rear, the total number must have been at least two millions, all of whom were nonproductive workers.

That our industry was deprived of such considerable amount of labor must have been a great blow. But great as this loss of labor was, it was soon made up by the following conditions: (1) the participation in productive labor of aged people, women and children, who had heretofore not done so; (2) the greatest possible extension of laboring hours; (3) the yearly increase of at least 500,000 laborers, who reached the age of labor; (4) the use and invention of various machines, in order to meet the demand for labor, proven by the unprecedented number of patents, registered in 1905; and (5) the improvements in different systems of production. We believe the greater part of the loss of labor due to the war was thus made up.

This belief is based upon the two circumstances: (1) there was no decrease in the amount of exports and (2) there was also no considerable decrease in the amount of manufactured products of all sorts, so far as our investigation goes.

INCREASE OF EXPORTS, 1904–1905

Articles	1903	1904	1905
	Yen	*Yen*	*Yen*
Food stuffs	32,433,025	34,656,859	39,675,385
Manufactured goods	76,502,521	96,167,777	95,588,883
Raw materials	161,894,789	157,750,224	158,659,551
Miscellaneous	15,141,285	17,154,726	24,365,797
Total	285,971,620	315,729,586	318,289,616

As this table does not suggest any decrease of exports, so there is no decrease in the actual amount of manufactured products, so far as we can judge from the material at hand. The amount in 1905 was not less than that in 1903, while there was a slight decrease in the amount in 1904. The products were: cotton, silk, hemp, textiles, knitted goods, dyed goods, chinas and porcelains, tiles, lacquered wares, mats and *goza*, manufactural chemicals, lacquer glue, oils, vegetable wax, indigo, camphor, peppermint, soap, Japanese paper, foreign paper, wheat, flour, starch, sugar, Bengal isinglass, canned goods, matches, leather, fertilizers, straw braids, chip braids, watches, glass, brushes and buttons, thirty-five in all.

Judging from these facts, we must say that over one million laborers after the war were ushered into our productive industry as a sort of surplus. Supposing one half of the number to be agricultural workers, and subtracting from the remaining half those who engage in some kind of nonproductive work, at least 300,000 or 400,000 must have gone into commercial and manufacturing life. Was there then any surplus of labor as the result of the inrush of the new laborers? This abundance of labor, after the war, together with the resulting economic conditions, caused the sudden increase in enterprises, and these enterprises absorbed the surplus labor. In 1906 the wages of labor rose considerably, notwithstanding the general fall in prices.[1] We believe we are not wide of the mark when we say that under the present circumstances in

[1] Table of wages, p. 177.

the nation, the rapid growth of commerce and manufactures can give employment for the new laborers that increase by the hundreds of thousands. In fact, there has never been since the war any indication of an excess of labor. If some 300,000 or 400,000 new laborers were absorbed by our commercial and manufacturing industry directly after the war, then there is no reason why it can not be done at the present time.

Lack of Labor

From the above it follows that labor is not in excess, but rather is lacking. Let us now see how this is so.

(1) Lack of Commercial Laborers.—In an article, entitled "Suggestions to Employers," in the *Employment World*, we find the following:[1]

> If employes are wanted, the application blank must be filled in and sent in at once. . . . As apprentices and maids are very scarce, we can hardly meet your immediate demands, but . . .

According to the director's own statement, employers get only 2 or 3 per cent of the apprentices that they need. This is a sign that our industry is short of labor. In the same number of the magazine we find the following statement by an employer:

> We are very much vexed by the men of employment offices, some of whom resort even to such extreme measures as to bring tramps. The latter run away as soon as their stomachs are full. At first, I could not understand why the apprentices, brought by such agencies, leave us after a few days, but later I have come to know that this was because the agents covet commissions. They entice away from their work those who are employed, on the pretext that better work will be found.

This shows that not only apprentices but also all sorts of commercial laborers are lacking. Such a condition as this could never exist, unless there were too much demand and too little supply of labor.

(2) Lack of Manufacturing Laborers.—Our manufacturing industry is making such a rapid growth that the rate of the increase of manufacturing laborers can hardly keep up with

[1] "Suggestions to Employers," *Employment World*, No. 8, published by the Osaka Employment Office.

it. All factories are having great trouble in finding operatives. Especially the spinning factories, well developed compared with other factories, are in constant trouble in securing operatives. The following is a statement found in the report for 1903 of the Factory Investigation Committee of the Commercial and Manufacturing Bureau:

According as the number of factories increases, the lack of laborers is keenly felt. They have to go all over the country in search of operatives. Some of them, however, confine the sphere of the collection of their operatives within a certain limit. In the collection, they either send their partners to certain districts, or depend upon some employment office. Even in the former case, they have to get the assistance of mediators, as they are not familiar with the particular conditions in each district. These mediators try to kidnap innocent rustics with flattering words. They furnish them with information concerning the profits and pleasure of the life of operatives, but try to conceal the troubles and sicknesses that accompany such a life. These mediators usually get a commission of one yen per operative and often receive additional rewards.

One of the consequences has been a competition among employers, who try every means to attract operatives to their own factories. This competition was carried to such extremes that an understanding has now been established among employers. All this goes to show that not only spinning factories but all other factories are in great need of operatives.

Take for example the case of the operatives in iron works. Words to the following effect are found in the above report:

In inviting steel operatives, one of two ways is usually resorted to, invitation through the operatives already employed, or advertisements. It is often the case that the operatives are relied upon who have many underhands. At rare intervals, partners are sent out, charged with collection.

Of the hands in glassware factories, the same report says:

The methods of getting hands are diverse, but the usual methods are these three, reliance upon mediators, or reliance upon the operatives already in employ, or the despatch of partners. Glassware factories are prosperous these days, but have great difficulties in finding hands. It sometimes happens that the hands in other factories are kidnapped. This bad practice of kidnapping is greatly extenuated in Tokyo, where new hands are brought by their boss, and not by employment offices. The different trade associations in Osaka pay particular attention to the means of guarding against kidnappers, which have, however, not been very effective.

Again, the report says, regarding printers:

It is very often the case, when business is brisk, that operatives, or apprentices, that have been in employ for several years, leave their factories on various pretexts.

The cotton, hosiery, brush and electric bulb factories, and several others, are also in the same plight:

These factories are usually on a smaller scale, and consequently the hands employed are smaller in number. Their methods of inviting hands are various. It is seldom that they send out their clerks to distant districts. Bills of invitation are posted up in the neighborhood, or advertising agencies are used, who go round the streets. The employers often get the assistance of their friends, who go forth in search of hands in likely places. In rare cases, in which middlemen are employed and sent out to distant districts, they use every cunning in order to earn their commission.

The foregoing extracts agree in showing the scarcity of manufacturing labor, rather than its excess. Not to mention the time when business is especially brisk, but even in usual times, kidnapping, or despatch of men to distant districts, takes place very frequently.[1] But it has already been shown that the rate of employments to labor has never decreased since. Operatives never have trouble in getting employment, but employers are troubled to get the necessary labor. That the want of labor is keenly felt on the part of different factories is also demonstrated by another fact, the lack of labor in mining works. Factories and mines can, to a certain extent, employ interchangeable laborers. If there is a surplus of laborers in manufacturing, when mining workers are in demand, the former must flow into the mines. But this has never happened, which is an evidence of the lack of labor in manufacturing circles. The owners of mines are trying every means to keep their miners, in which they often fail. This is especially the case with coal mines. A keen competition often takes place among the owners for getting the necessary labor. They often appeal to force in their kidnapping.

[1] The report of the Commercial and Manufacturing Bureau, from which the above extracts are quoted, was prepared some ten years ago.

Conclusion

We have estimated that the yearly increase of commercial and manufacturing employes is 400,000 or 500,000. The different cities of the country absorb all the increasing laborers and are in want of more. Employers are always complaining of the want of labor. Such being the case, the largest percentage of soldiers, engaged as they are in nonproductive works, when discharged, can easily get employment in commercial and manufacturing circles, even though they may not engage in farming.

Summary

Our conclusion was that soldiers, and those commercial and manufacturing people who depend upon the army for their livelihood, can earn it when they leave the army not only by farming but in commerce and industry. In other words, supposing that the army were disbanded, there would be no less employment; there would be ample room for them in our productive industry.

But this conclusion is not necessarily based upon the premise that there is ample room for employment in our agriculture and commerce and manufacturing industries. We shall come to the same conclusion, even on the premise that there seems to exist no condition in which employment can make a fresh combination with labor, so long as the present state of things remains the same. The total amount of wages to be paid in certain communities can never go down below the total amount necessary to support the whole of the laboring classes. In some cases, the former may temporarily go down below the latter. But, in such cases, the considerable part of the laboring classes will make desperate efforts in order to earn their livelihood, with the result that the total of their wages will go up above the amount that is necessary for their subsistence. The total of their wages will, by the competition among laborers, be distributed, so that each of them will never be out of employment. Therefore, if cases happen in which those who depend upon the army for their livelihood lose their

employment they will soon find employment in some other field.

The agricultural, commercial and manufacturing people who get their livelihood through the army are contributing to the productive works of the country by their works connected with the army, such as manufacturing the goods in demand by the army, or transporting their products. Even supposing that the system of conscription is done away with, there would be no change in the circumstances, so far as they engage in some sort of productive industry. Of course, there is no doubt that, if the labor of the soldiers could be turned into productive works, the national economic life would be so much benefited. And this means that the system is depriving the nation of its productive labor. The military life may contribute to the efficiency of labor, after the discharge of the soldiers, but this is very little as compared with the loss of labor.

CHAPTER VII

EFFECTS ON CONSUMPTION

It is very difficult to find a proper method of ascertaining the amount of consumption by a certain part of the members that constitute a national, economic whole. Even its theoretical consideration is accompanied with great difficulties. It appears at first thought that our task would be enough if we sum up the expenses of each member, but the result can but be a very indefinite one. Consider, for example, the case of the general expenses of the people at large. A conspicuous part of this expense is the tax. But no goods are consumed that are equivalent to the amount so paid out. The greater part of the expenses of pleasure-seeking nobles is given to women, but this is not the consumption of goods. The amounts paid for certain facilities of position, "which are nonproductive," do not mean a consumption of goods. As these expenses affect those of others by shifting, it is very difficult to know definitely how much of the total outlay is paid for the equivalent goods. Let us, however, disregard such difficulties, for the time being, and assume that the amount of the expenses of each member of society is approximately equivalent to the amount of goods consumed.

Starting from such an assumption, let us see first how much are these expenses of the soldiers and their friends, and then of the people at large. And when each is ascertained, let us compare it with the amount of the consumed goods. Such is our method of studying the effects of conscription upon consumption.

Expenditure per Soldier

State Expenditure for Training of Soldiers

At the beginning of the Meiji Era, all the conscripts were self-supporting as regards their clothing, etc., but this has ceased to exist as a principle since the promulgation of the

Conscription Law in 1873. At present all the materials necessary for a soldier are furnished by the state.

Our estimate of the military expenditure per soldier, out of the ordinary state expenditures, is as follows:

MILITARY EXPENDITURE PER SOLDIER

Items	1909	1910	1911	1912
	Yen	*Yen*	*Yen*	*Yen*
Salary	72.83	89.01	89.94	91.42
Office expenses	5.63	5.17	5.15	5.12
Repairs	6.21	6.12	5.96	5.84
Travels	9.05	9.27	10.89	9.86
Miscellaneous	6.15	5.86	6.33	6.39
Allowance	4.36	5.61	5.94	5.93
Forage and food	86.87	86.86	90.05	90.06
Clothing	36.22	33.91	32.21	31.78
Ammunition	26.32	27.45	26.39	25.20
Horses	8.58	9.89	8.00	7.80
Exercises	9.28	9.21	7.93	8.26
Daily articles	8.25	7.99	8.23	8.00
Transportation	7.51	5.97	5.71	4.87
Other expenses	6.54	3.60	5.58	5.69
Total	293.80	305.92	308.35	306.22

The average expenditure per soldier is 305 *yen* or 310 *yen*, as the table above shows. But, this average includes the expenses for ammunition, horses, etc., and also expenses connected with officers. Hence, we must limit the items to those that are necessary for the sustenance of each soldier. Such items are (1) salaries and wages, (2) provisions, (3) clothing, (4) exercises, and (5) miscellaneous (utensils, harness, etc.). Of clothing, food and habitation, the expenses for habitation are excluded, because we have no means of calculating them. The military and naval authorities too did not include them in their estimate of the expenses for the training of soldiers and sailors. This is a point that we should not overlook in the comparison between soldiers' expenses and those of the ordinary people. Of the various items mentioned above, salaries, the expenses for military exercises and boarding, and miscellaneous expenses, are almost fixed as to the amount of

money. But rice and wheat and clothing can not be fixed in money, because their prices change from time to time.

As the total average of the expenses of all the division is not published, our estimate of the expenses for the training of soldiers must be obtained from inference in a limited sphere. The following estimate is approximately accurate:

ANNUAL TRAINING EXPENSES PER SOLDIER

Salary	Forage and Food	Clothing	Exercises	Miscellaneous	Total
Yen 19.50	*Yen* 76.00	*Yen* 32.00	*Yen* 4.00	*Yen* 6.50	*Yen* 138.00

ANNUAL TRAINING EXPENSES PER NONCOMMISSIONED OFFICER

Salary	Forage and Food	Clothing	Exercises	Miscellaneous	Total
Yen 114.00	*Yen* 76.00	*Yen* 32.00	*Yen* 4.00	*Yen* 6.50	*Yen* 232.50

From the above table, it appears that the military annual expenses per soldier amount to about 140 *yen*, and those per noncommissioned officer to about 235 *yen*. The expenses of the noncommissioned officers living outside the barracks are not included in the above estimate. Supposing the number of soldiers to be 200,000, and that of noncommissioned officers to be 20,000, the average annual expenses per soldier would be —

$$(140 \text{ yen} \times 20 + 235 \text{ yen} \times 2) \div (20 + 2) = 175.00 \text{ yen}$$

This estimate includes the noncommissioned officers living outside the barracks.

The naval annual expenses per sailor are published.[1] The expenses are divided only into the three items of salaries, clothing and provisions. If to these we add the other expenses, the total would be greater.

[1] *Annual Report of the Naval Department*, 1910.

ANNUAL TRAINING EXPENSES PER SAILOR

Salary	Clothing	Provisions	Total
Yen 64.970	*Yen* 37.166	*Yen* 85.280	*Yen* 187.416

ANNUAL TRAINING EXPENSES PER NONCOMMISSIONED OFFICER

Salary	Clothing	Provisions	Total
Yen 224.017	*Yen* 27.133	*Yen* 85.280	*Yen* 336.430

Supposing the number of sailors to be 35,000 and that of noncommissioned officers to be 10,000, then the annual average per head would be 220-odd *yen*. But as many of the noncommissioned officers support their families, we have to reduce their number, in our estimate, by about one-half. The annual average per head would then be 205 or 206 *yen*.

Either in the army or in the navy, the greater part of the expense is for clothing and food. But the average is subject to change, according to the fluctuation of the prices of rice and wheat. The above estimate will, however, be near the truth so long as prices remain at the same level they have now reached.

Admitting that so large an amount of the above estimate is paid out of the national treasury, there are still two further facts of which notice must be taken. (1) Are all the salaries turned to personal expenses? (2) In what relation does the unit value of the goods consumed stand to the common retail prices? It is a well known fact that soldiers save their money, or send it home, little as it is. Statistics prepared by the Eighteenth Division are as follows:

Savings of Soldiers, Eighteenth Division

Corps	Savings		Money Sent Home	
	Number of Depositors	Amount	Number of Senders	Amount
		Yen		*Yen*
The 46th Infantry	795	3,016.02	101	1,025.01
The 55th "	1,173	4,819.15	99	1,201.65
The 48th "	813	2,861.01	137	1,945.88
The 56th "	977	5,211.24	76	753.87
The 22nd Cavalry	251	914.17	10	155.00
The 24th Field Artillery	144	1,001.46	38	446.20
The 3d Mountain Artillery	142	576.63	17	134.35
The Sasebo Heavy Artillery	321	1,448.84	29	332.70
The Nagasaki Heavy Artillery	207	515.43	35	177.32
The 18th Engineering	204	758.46	42	309.30
The 18th Commissariat	93	544.75	29	256.34

We do not know of any other division that has compiled statistics of this kind. According to the table above, about one-half of the soldiers seem to send more or less money home, or to save it. Of course, we do not entertain any doubt of the statistics above, but it would be too hasty a conclusion, if we should think that the soldiers are actually saving their money. For they are not permitted to keep about them money from home, or possess it, from some other source. Above a fixed amount, they are ordered to deposit it. They are always warned against extravagance. Their savings constitute one of the necessary conditions to be marked as an excellent soldier. Hence, it very frequently happens that their savings come from home rather than from their salary. And such savings too will be turned over to their own personal expenses afterwards. That their savings do not come from their salary is evinced by the fact that of the 1,778 soldiers belonging to the 55th Infantry Regiment, 1,497 received money from home, the amount reaching 4,638.15 *yen*. That this is a very moderate estimate rather than actual fact, will be discussed later. If 1,497 men out of 1,778 men get money from home, those who save money out of their own salary must be 1,778−1,497, that is, only 281. But the actual fact

is that 1,272 of them send their money home, from which follows that the greater part of the amount of the money saved or sent home by them does not come from their own salaries. We do not mean to say that no soldier saves or sends money home. As to the soldiers below noncommissioned officers, those who are poorest of all the members of their company and those few who are very frugal do not spend the whole of their salaries, some of them sending it to their homes. But this may well be regarded as a negligible quantity. The yearly average of the salaries of noncommissioned officers is 110 *yen* or so. Supposing that they spend some 50 *yen*, the balance would be 60 *yen*, which we shall discuss in detail later. We think it possible that they save or send home the greater part of the balance. The number of the money senders, through the Eighteenth Division, is 620, and the total amount of money is 6,800 *yen*, that is, ten or eleven per head. The whole of the amount can be regarded as being sent by the noncommissioned officers. The number of money savers is 5,266, and the amount is about 22,000 *yen*. We have reason to regard the greater part of this as being that of the noncommissioned officers. When we see that the number of money-saving noncommissioned officers throughout the Fourth Division is about one hundred, and that the amount is 1,500 or 1,600 *yen*, and when we see that the districts of Kyushu, where the Eighteenth Division is located, are places convenient for money saving, we can easily believe that the greater part of the 22,000 *yen* belongs to the noncommissioned officers. From our personal knowledge all the men of every company, except a few, get money from home. We have seen above that 1,497 men of a certain regiment get money from home. But we think that this number is based upon false statements of the men, who wish thereby to get the confidence of their superiors or comrades. That such a great per cent of soldiers get money from home shows not only the impossibility of money saving, on the part of most of the men, but also the insufficiency of their salary even for their daily expenses.

From what we have observed above, it follows that noncommissioned officers are actually saving their money or sending it home, but the common soldiers, except a few, save or send money, not out of their own salary, but out of the amount sent from home. There is no doubt that the whole of the salary of common soldiers goes toward their daily expenses.

Let us now glance at the difference between the unit value of the goods consumed by soldiers and the common retail price. Of course, we are not able to express such a difference in definite figures. But we find that one-fifth or one-fourth of the training outlay goes for clothing, the greater part of which is made in the Senju Woolen Factory, or in the Clothing Department and its branches. Since clothing is made by the army itself, their unit value, of course, must be cheaper than the common retail value. It is an undeniable fact that the clothing valued at 30 *yen* per head in the army would be valued at 40 *yen* or more in the ordinary market.

The next point for consideration is that the greater part of the expenses for provisions is spent for rice and wheat. The national Treasury purchases and distributes them among the different corps. Needless to say, the purchase price is much lower than the common retail price.

Still cheaper are the cooking materials. About 4 per cent of the 76 *yen* for the provisions are spent for these materials. Vegetables, fish, meat, sugar, soy, bean paste, etc., are purchased wholesale from those merchants patronized by the government authorities. Their prices are lower than the ordinary prices by 2 or 3 per cent.[1] Such being the case, soldiers whose ration costs only 8 or 9 *sen* per day, are fed better than the common people. As we have said, we can hardly express in definite figures how cheap are the goods consumed by the army. Nevertheless, the fact is certain that they are cheap. From this fact, we can infer that the total amount of the goods consumed by the army is a great deal larger than the amount indicated by the figures of the training expenses. The same thing might be said of the naval training expenses.

[1] See the Kyoto *Hinode Shimbun*, June, 1913.

We now conclude this part of our investigation, by saying that all the expenditures of the national Treasury for the training of soldiers are spent by the common soldiers, while part of the salaries of noncommissioned officers is not spent but saved. We may take the total amount of the expenses of the said officers as being almost equal to that of the soldiers. A quantity of goods, a great deal larger than could be bought in the common market with an amount of money equal to the training expenses, is taken away from the economic world of the people.

The Amount of Money Soldiers Get from Home

In the navy, few get money from home, because the salaries are comparatively high, and, owing to their life at sea, they have comparatively few chances of spending money. But in the army there is almost no one who does not get money from home. One reason for this is that the soldiers' salary is small. We have already seen that a common soldier is paid 20 *yen* per year, on an average, and a noncommissioned officer 110 *yen* or so per year, the details of which are shown below:

MONTHLY ALLOWANCE OF NONCOMMISSIONED OFFICERS AND COMMON SOLDIERS

Officers and Soldiers		Inside the Barracks	Outside the Barracks
		Yen	*Yen*
Sergeant-majors and those on equal footing with them, also first class experts	Special A		45.00
	Special B		39.00
	Special C		33.00
	First class	19.80	30.60
	Second class	17.00	27.00
	Third class	15.00	25.50
Sergeants and those on equal footing with them, also second class experts	First class	12.90	23.00
	Second class	10.80	21.00
	Third class	9.00	19.00
	Fourth class	7.80	18.00
Corporals and those on equal footing with them, also third class experts	First class	5.70	16.00
	Second class	4.65	15.00
Soldiers on equal footing with the noncommissioned		2.34	
Soldiers on equal footing with the noncommissioned of the defense guards		3.51	
Higher class soldiers and others		1.95	
Higher class gendarmes and others			13.50
First and second class soldiers and others		1.56	
Jailors		.75	

MONTHLY ALLOWANCE DURING CALLING OUT

	Yen		*Yen*
Higher class soldiers and others.	1.80	Probationers of military band..	3.34
Sergeant-majors and others....	5.70	First and second class soldiers and others.....	1.50
Sergeants and others.....	3.60	Supplementaries.....	1.50
Corporals and others.....	2.40		

Of the expenses of common soldiers, the amounts that they pay to their sutlers are definitely known. Even a glance over these expenses shows that their salary is too small for their daily expenses. The following is a table, prepared in 1911, showing a comparison between the monthly average of the proceeds of a sutler and the amount of the salaries paid to the soldiers of the Sixteenth Division:

	Regiments and Battalions	Salary	Proceeds of Sutlers per Soldier	Balance
		Yen	*Yen*	*Yen*
A	The 9th Infantry.....	2.06	1.51	+ .55
B	The 19th Infantry.....	2.17	1.36	+ .81
C	The 38th "	2.14	1.57	+ .43
D	The 53d "	2.03	1.34	+ .69
E	The 20th Cavalry.....	2.20	1.87	+ .33
F	The 22d Field Artillery.....	2.15	2.10	+ .05
G	The 16th Engineering.....	2.25	1.65	+ .60
H	The 16th Commissariat.....	1.96	1.92	+ .04

This shows that throughout the division the salary is more than the expenses. But we must not forget that this table includes the salary of the noncommissioned officers. Below we give a comparison between the salary of common soldiers and the proceeds of sutlers. It is believed that there is little difference between noncommissioned officers and common soldiers, as regards their expenditures with the sutlers.

Regiments and Battalions	Salary	Proceeds of Sutlers	Balance
	Yen	*Yen*	*Yen*
A	1.62	1.51	+ .11
B	1.62	1.36	+ .26
C	1.62	1.57	+ .05
D	1.52	1.34	+ .28
E	1.66	1.87	− .21
F	1.62	2.10	− .48
G	1.64	1.65	− .01
H	1.60	1.92	− .32

According to this table, the salary is short of the expenses at sutlers, except in the case of infantry soldiers, in which the excess of their salary is only 5 *sen* to 28 *sen*. Moreover, their money is spent not only at sutlers, but at general goods stores, restaurants, bars, etc. Is it not plain that the salary of any soldier is short of his expenses? The result is that all the deficit is made up with the money that soldiers get from home.

As to the amount of the money that they get from home, it is difficult to estimate, because the circumstances of their districts and of their regiments are so different and various. If the corps to which they are attached are located in cities, their expenses would be larger, for in cities prices are high and accommodations for pleasure are complete. Take, for example, the case of the regiments at Osaka, one of the greatest cities in Japan, where temptations are many and various. The soldiers are at the mercy of the extravagant city life. The regiment at Fukuchiyama is, on the other hand, stationed at a place remote from cities. The opportunities for dissipation are few. Nor must we forget the manners and customs of the places where regiments are located. Experienced officers tell us that of about one hundred and fifty men of a company, only thirty keep their chastity. All this goes to show that the expenses of soldiers vary according to the circumstances of the places where they live. It sometimes

happens that they are given up to amours, and that with little expense. The regiment at Sabaye is an example. This shows that the manners of the places where soldiers live have much to do with the amount of their expenditures. In estimate of soldiers' expenses, we must also take into our consideration the circumstances of the corps to which they belong. Generally speaking, the greatest amounts are spent by artillery soldiers. Next to them in amount, come commissariat soldiers, infantry and engineering soldiers being last. As we are not in possession of reliable statistics of all the expenses, we give below a table showing the proceeds of the sutlers in the Sixteenth Division, according to its different corps. Each amount is the average per soldier, April, 1912, to March, 1913.

MONTHLY AVERAGE PER SOLDIER, APRIL, 1912–MARCH, 1913

Corps	April	May	June	July	Aug.	Sept.	Oct.
	Yen	*Yen*	*Yen*	*Yen*	*Yen*	*Yen*	*Yen*
The 9th Inf. Reg.....	1.74	1.53	1.33	1.48	1.11	1.32	1.48
The 19th " "	1.87	1.80	1.22	1.43	1.34	1.93	1.46
The 38th " "	1.74	1.70	1.52	1.88	1.15	1.21	1.88
The 53d " "	1.56	1.46	1.38	1.48	1.57	1.17	1.20
The 20th Cav. Reg.....	1.62	1.55	1.47	1.50	1.93	1.38	.99
The 22d Field Art.....	1.93	1.40	1.54	1.94	1.95	2.01	1.80
The 16th Eng.....	1.98	1.38	1.14	1.15	1.29	1.31	1.24
The 16th Commis.	1.47	1.43	1.19	1.39	2.14	1.44	1.74

Corps	Nov.	Dec.	Jan.	Feb.	Mar.	Total	Monthly Average
	Yen	*Yen*	*Yen*	*Yen*	*Yen*	*Yen*	*Yen*
The 9th Inf. Reg.....	1.34	1.11	1.21	1.27	1.66	16.57	1.51
The 19th " "	1.31	1.18	1.70	1.56	1.90	18.70	1.36
The 38th " "	1.17	1.60	2.33	1.98	2.15	20.31	1.57
The 53d " "	.99	1.50	1.23	1.35	1.60	16.49	1.34
The 20th Cav. Reg.	.97	1.66	1.35	1.50	2.04	17.96	1.87
The 22d Field Art.....	1.00	1.63	1.95	1.81	1.63	20.59	2.10
The 16th Eng.....	1.00	1.50	1.35	1.12	1.32	15.78	1.65
The 16th Commis.....	1.63	1.77	1.76	1.61	1.83	18.40	1.92

The following is a table for the Eighteenth Division, including the expenses at sutlers and other expenses:

Corps	Number of Soldiers	Expenses at Sutlers	Other Expenses	Total	Average per Soldier
		Yen	*Yen*	*Yen*	*Yen*
The 46th Inf.....	1,754	15,239.61	7,986.94	23,226.55	12.67
The 55th "	1,778	14,484.59	9,657.44	24,142.03	13.58
The 48th "	1,697	16,410.36	6,166.80	22,577.16	13.30
The 56th "	1,289	9,831.65	5,022.22	14,853.87	11.52
The 22d Cav.	366	3,897.02	1,058.58	4,955.60	13.54
The 24th Field Art..	621	5,405.45	3,510.61	8,916.06	14.36
The 3d Mt. Art.....	306	2,769.88	1,730.42	4,500.30	14.70
The 18th Eng.....	453	4,016.16	1,477.13	5,493.29	12.12
The 18th Commis..	271	2,981.47	1,308.28	4,289.75	15.83[a]

[a] These statistics are for the five months, from July to November, 1912.

The phrase "other expenses" in the table above, is too indefinite to rely upon. But supposing that the figures under this heading correspond to the actual expenses, we shall find that there is a certain similarity between these figures and those of the Sixteenth Division, which do not include "other expenses." That is, the amount of the expenses is greatest with the field and mountain artilleries and with the commissariat. The cavalry is next to them, the infantry and the engineering being last.

Admitting that there is such a difference in the expenses of soldiers in the different branches of the army, what could be taken as the absolute amount of money that they get from home? Although there is such a difference, according to the branch of service, yet the difference is not very great. Of course, there may be comparatively greater differences, according to localities. But we can avoid an overestimate if we depend upon the statistics of the corps in remoter places. We have, however, only one table of statistics of this sort, which is that of the Eighteenth Division. Besides, we have to make allowance for the fact that the greater part of the amount they get from home is concealed. Bearing all these circumstances in mind, let us look at the statistics:

TABLE I—AMOUNT OF MONEY OBTAINED FROM HOME, DURING FIVE MONTHS FROM JULY TO NOVEMBER, 1912

	Corps	Number of Soldiers	Money Orders		Other Money Receipts		Total	
			Drawers	Amount	Recipients	Amount	Recipients[a]	Amount
A	The 46th Inf	1,754	117	525.50	1,012	2,664.49	1,129	3,189.99
B	The 55th "	1,778	341	783.21	1,156	3,584.94	1,497	4,368.15
C	The 48th "	1,697	88	164.04	1,388	4,238.07	1,476	4,402.11
D	The 56th "	1,289	348	1,171.18	863	2,851.10	1,211	4,022.28
E	The 22d Cav	366	88	350.80	170	443.08	258	793.88
F	The 24th Field Art	621	158	509.00	188	1,123.93	346	1,632.93
G	The 3d Mt. Art	306	26	54.50	70	160.50	96	215.00
H	The Sasebo Heavy Art	337	19	40.10	172	268.49	191	308.59
I	The Nagasaki Heavy Art	223	82	174.50	87	178.30	169	352.80
J	The 18th Eng	453	98	214.65	239	457.67	337	672.32
K	The 18th Commis	271	80	305.60	172	777.10	252	1,082.70

[a] As the same person may get money both by money order and in other ways, the actual total must be less.

TABLE II

	Percentage of Soldiers Receiving Money	Percentage of Soldiers Receiving Money in Other Ways than by Money Order
A	67.2	411.
B	84.2	458.
C	78.9	2,584.
D	93.9	273.
E	70.5	126.
F	55.7	221.
G	31.4	294.
H	56.7	669.
I	75.8	102.
J	74.4	213.
K	93.0	254.

TABLE III

Total Number of Soldiers	Total Amount of Money *Yen*	Average per Soldier *Yen*	Average per Month *Yen*	Average per Year *Yen*
9.095	21,210.45	2.335	.4667	5.604

From the above tables, it is noted that the number of those who get money from the hands of visitors, or by other similar ways, is a great deal larger than that of those who get money by money order. The former is about double the latter, except that it is twenty-five times as much in the Forty-eighth Regiment. The money that soldiers get directly from visitors or friends can be concealed if they so desire. But from the fact that so much of the amount received in this way is published in the statistics, we can infer that it is actually not less than the amount received by money order. In other respects, we can hardly rely upon these statistics. For example, how could it be possible that only 50 to 70 per cent of the soldiers get money from home?

Even the officers themselves can hardly know the actual amount of money their men get from home. The amount sent by money order seems to be quite obvious, yet it is often the case that soldiers get money through a money order addressed, not to themselves, but to friends, in order to escape the notice of the officers. And the friends are usually restaurant keepers, etc. Even the amount received by money orders is, therefore, not to be exactly ascertained. Our only clue in the matter is the statistics of the amount paid on

money orders at the Post Office of Zentsuji, where the Eleventh Division is quartered. In the neighborhood of Zentsuji, there are two other towns almost equal to it in size, Sakade and Kotohira. The former is a small commercial center of the district, while the latter is a place well known on account of its shrine. The population of the former (Sakade) is about equal to that of Zentsuji, though slightly larger at present.

	Year Ending		
	1902	1908	1911
Sakade	10,759	14,470	15,866
Zentsuji	12,174	14,621	14,108

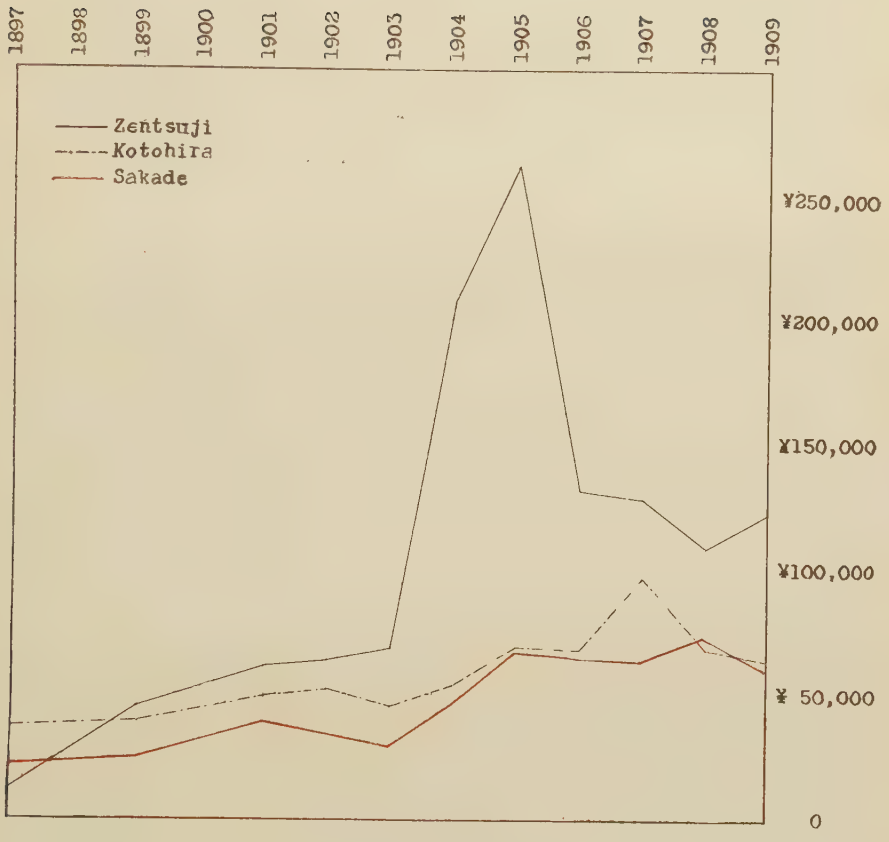
Zentsuji depends for its prosperity upon the division and the Zentsuji Temple, while Sakade is a commercial center.

If we exclude from our consideration the amount of money sent to soldiers, we can hardly believe that Sakade is below Zentsuji in the amount paid in money orders.

The population of Kotohira is almost equal to that of Sakade, and in them the amounts of money paid on money order are about equal. We give this comparison because we want to show that Sakade is not particularly less in its amount of the money order paid. In other words, we want to show that we are justified in selecting Sakade, which is about equal in population to Kotohira, and comparing it with Zentsuji.

Comparison of Amounts Paid on Money Orders in Zentsuji, Kotohira and Sakade

Year	Zentsuji	Kotohira	Sakade
	Yen	*Yen*	*Yen*
1897	11,596.245	36,405.738	22,035.499
1898	....	....	....
1899	44,444.287	38,728.025	25,953.899
1900	....	....	....
1901	61,648.704	40,987.075	38,383.915
1902	62,761.426	50,166.549	34,528.314
1903	67,671.988	44,898.560	29,530.611
1904	206,220.084	53,371.431	46,007.962
1905	261,380.443	69,201.508	67,539.050
1906	132,680.492	68,742.741	65,496.257
1907	128,587.083	96,930.893	63,205.785
1908	109,483.048	66,968.034	73,384.434
1909	123,986.000	64,184.000	59,357.000


1897
1898
1899
1900
1901
1902
1903
1904
1905
1906
1907
1908
1909
Zentsuji
Kotohira
Sakade
¥250,000
¥200,000
¥150,000
¥100,000
¥ 50,000
0

We shall find a considerable difference in the amount paid on money orders between Zentsuji, on the one hand, and the two other towns, on the other. Since the establishment of the division in 1899, Zentsuji, which was below the other towns in the amount of money order payments, has gone ahead of them in this respect. We leave out of our consideration the figures for 1904, 1905 and 1906, because they are due to the influence of the war, and also those for 1907, because the town of Kotohira had a great festival in that year. But as to the difference in the amount paid on money orders in 1907 to 1909 at Zentsuji and at the other towns, we may attribute it to the fact that the soldiers get money from home. The average amount for these years at Zentsuji is $\frac{362{,}056\ yen}{5} = 65{,}420$ and $\frac{327{,}099\ yen}{5} = 65{,}420\ yen$, at the other towns. The difference of about 55,000 *yen* must be regarded as the amount of money received by the soldiers at Zentsuji. We shall get the following result, if we parcel out this amount to the total number of the soldiers at Zentsuji. The amount since 1910 will suit our purpose, for the division has since been stationed in China.

The annual report of the Military Department, 1908, tells us that the number of noncommissioned officers and common soldiers was 3,884. As we do not know the figures in 1907 and 1909, we take the figures above as showing the average number. The average amount received by money orders, per soldiers, would be (120,685 *yen* − 65,420 *yen*) ÷ 3,884 = 55,265 *yen* ÷ 3,884 = 14.23 *yen* (short); that is, 14 *yen* and 23 *sen* per soldier. Roughly estimated, we take it as 15 *yen*. Besides these 15 *yen*, there is the amount of money received from visitors. The authorities of the Eighteenth Division estimate it about double the amount paid on money orders. But in making this estimate, they counted only the amount of the money orders addressed to the soldiers, which means that this estimate is less than the actual amount. We shall, therefore, regard the amount of money received from visitors

as about equal to that received by money order. And this is admitted by the said authorities. Then, about 30 *yen* must be the total average per head of the money the soldiers get from home.

Our opinion is that this amount of 30 *yen* is approximately not only the amount the soldiers at Zentsuji get from home, but also that it holds good for the soldiers throughout the country. This is surely not an overestimate. Zentsuji is a little town of 15,000 inhabitants, while all other places, where troops are quartered, are, as a rule, larger in size. Zentsuji is also a town where the prices of goods are comparatively low. Let us take a glance at the following table of the boarding expenses throughout the divisions:

The old jurisdiction districts	The first district	The 7th Division
	The second "	The 1st "
	The third "	The 8th and 14th Divisions
	The fourth "	The 2d, 4th and 18th Divisions
	The fifth "	The 6th, 9th, 12th, 13th and 16th Divisions
	The sixth "	The 15th Division
	The seventh "	The 3d, 5th, 10th, 11th and 17th Divisions
The present jurisdiction districts	The first district	The 7th Division
	The second "	The 1st and 4th Divisions
	The third "	The 2d, 8th, 12th, 13th, 14th and 16th Divisions
	The fourth "	The 6th, 9th, 10th, 11th, 15th and 16th Divisions
	The fifth "	The 3d, 5th and 17th Divisions

The boarding expenses are greatest in the first district while those in the seventh are least. Those of the Eleventh Division jurisdiction, that is, Zentsuji, are the lowest, or next to the lowest. Since Zentsuji is a small town, where prices are low and accommodations for pleasure are very incomplete, the average amount of money received from home, which we have estimated to be 30 *yen*, is surely not an overestimate. Besides, this estimate of ours agrees with what we hear personally about the expenses. It is said that soldiers in the ordinary towns get about 2 *yen* per month, and about 4 or 5 *yen* in case of special manoeuvers. In the northeastern districts, the amount must be less, while it must be larger in the districts around Kyoto and Osaka. The average amount is,

after all, about 30 *yen*. Captain Masuda also estimates it to be about 30 *yen* in his work entitled "A Dissertation on Military Tax."

Expenses at the Time When Soldiers Enter and Leave Barracks

Thus far, we have devoted ourselves to the study of the expenses paid by the national Treasury and by soldiers themselves. Our study would be incomplete unless we obtain some information concerning the expenses of the soldiers on their entrance to, and departure from, barracks. Of these expenses, the following are important:

Expenses on entrance:
(a) Clothing,
(b) Travel,
(c) Entertainments,
(d) Entrance expenses.

Expenses at departure:
(a) Clothing,
(b) Purchase of souvenirs,
(c) Entertainments,
(d) Miscellaneous.

Of course, statistics of such expenses throughout the whole country are not obtainable. There are, however, some localities that are in possession of reliable statistics of such expenses. Although the items are not necessarily the same, yet we can make some general observations concerning the expenses.

TABLE I.—STATISTICS OF THE SECOND DIVISION, CONCERNING THE EXPENSES AT DEPARTURE, NOVEMBER, 1912

Corps	Souvenirs	Per Head	Necessary Articles	Per Head	Total per Head
	Yen	*Yen*	*Yen*	*Yen*	*Yen*
The 29th Inf. Regiment....	3,425.250	4.92	3245.18	4.66	9.58
The 65th Inf. Regiment....	3,609.103	5.18	1495.97	1.91	7.09
The 4th Inf. Regiment.....	5,706.000	7.20	2983.15	4.00	11.20
The 32d Inf. Regiment.....	2,786.880	?	2957.75	4.20	4.20+x
The 2d Cav. Regiment.....	308.700	2.57	98.00	1.00	3.57
The 2d Field Art. Regiment	316.000	2.25	400.00	2.50	4.75
The 1st Mount. Art. Battalion.....	278.550	3.86	367.75	4.00	7.86

TABLE II.—EXPENSES AT ENTRANCE AND DEPARTURE IN A CERTAIN PREFECTURE IN 1912

Speeding and Welcoming Expenses, Etc., No. 1

	The Total of Soldiers, Sped and Welcomed	Speeding and Welcoming Expenses							Soldiers' Own Expenses at Entrance and Departure				
		Construction of Arches	Flags	Lanterns	Presents of Wines and Food	Miscellaneous	Total	Per Head	Dinners and Entertainments	Distribution of Souvenirs	Miscellaneous	Total	Per Head
		Yen	*Yen*	*Yen*	*Yen*	*Yen*	*Yen*	*Yen*	*Yen*	*Yen*	*Yen*	*Yen*	*Yen*
District A.	416	110.00	90.00	....	1,125.60	420.00	1,745.00	4.194	2,140.00	582.00	272.00	2,994.00	7.204
District B.	388	47.10	44.795	.58	786.40	260.25	1,139.125	2.935	1,376.905	289.37	192.07	1,858.435	4.789
District C.	198	.20	10.745	....	434.30	141.30	586.545	2.457	341.30	190.85	27.00	559.15	2.823
District D.	407	88.10	51.45	67.03	896.56	932.30	2,035.44	4.988	761.25	326.50	197.50	1,285.25	3.150
District E.	580	10.60	395.01	6.00	2,115.50	582.37	3,109.48	5.361	2,980.88	574.05	665.35	4,220.28	7.278
District F.	344	....	122.56	4.07	1,210.48	187.39	1,524.40	4.413	1,932.28	380.91	672.31	2,985.50	8.678
District G.	567	....	70.91	....	1,563.20	619.30	2,253.41	3.981	3,395.66	820.20	315.10	4,530.96	7.998
City A....	145	10.20	25.30	13.35	373.20	50.195	472.245	3.256	1,111.00	212.00	.60	1,323.60	9.128
City B....	97	....	21.62	....	....	....	21.62	0.222	26.30	....	....	26.30	.272
Total.	3,141	266.20	832.39	91.03	8,504.54	3,193.105	12,887.265	4.102	14,061.665	3,375.88	2,345.93	19,783.475	6.298

Greatest Amount of Expenses for Each Item, No. 2

	Speeding and Welcoming Expenses						Soldiers' Own Expenses			
	Construction of Arches	Flags	Lanterns	Presents of Wines and Food	Miscellaneous	Total	Dinners and Entertainments	Distribution of Souvenirs	Miscellaneous	Total
	Yen	*Yen*	*Yen*	*Yen*	*Yen*	*Yen*	*Yen*	*Yen*	*Yen*	*Yen*
District A	3.00	3.00	....	15.00	24.00	45.00	50.00	15.00	6.50	71.50
District B	2.00	7.50	0.15	22.50	3.00	35.15	65.76	12.00	15.00	92.76
District C	0.20	1.80	....	30.00	8.00	40.00	25.00	15.00	5.00	45.00
District D	5.00	0.58	0.87	6.30	....	12.75	85.00	4.50	....	89.50
District E	3.00	15.00	5.00	18.00	20.00	61.00	35.00	20.00	40.00	95.00
District F	....	8.00	3.00	40.00	13.00	64.00	40.00	40.00	15.00	95.00
District G	....	3.00	....	30.00	15.00	48.00	100.00	30.00	10.00	140.00
City A	1.50	5.00	4.50	20.00	13.00	44.00	70.00	30.00	0.60	100.60
City B	....	6.30	....	....	....	6.30	10.00	....	....	10.00
Total	14.70	50.18	13.52	181.80	96.00	356.20	480.76	166.50	92.10	739.36

Average Amount of Expenses for Each Item, No. 3

	Speeding and Welcoming Expenses						Soldiers' Own Expenses			
	Arches	Flags	Lanterns	Wines and Food	Miscellaneous	Total	Dinners and Entertainments	Distribution of Souvenirs	Miscellaneous	Total
	Yen	*Yen*	*Yen*	*Yen*	*Yen*	*Yen*	*Yen*	*Yen*	*Yen*	*Yen*
District A	1.00	0.50	....	5.00	3.00	9.50	10.00	3.00	1.00	14.00
District B	1.00	1.00	0.07	15.00	2.00	19.07	10.00	4.30	1.50	15.80
District C	....	0.60	....	2.00	3.00	5.60	2.00	2.00	0.50	4.50
District D	1.90	0	....	7.25	....	9.15	7.80	6.10	....	13.90
District E	0.50	2.00	0.40	3.00	1.50	7.40	3.00	1.50	1.50	6.00
District F	....	0.50	....	3.00	3.00	6.50	3.00	1.50	1.50	6.00
District G	....	1.50	....	15.00	7.50	24.00	30.00	10.00	3.00	43.00
City A	1.20	2.50	0.50	10.00	5.00	19.20	30.00	10.00	0.30	40.30
City B	....	2.50	....	....	....	2.50	5.80	....	....	5.80
Total	5.60	11.10	0.97	60.25	25.00	102.92	101.60	38.40	9.30	149.30

Smallest Amount of Expenses for Each Item, No. 4

	Speeding and Welcoming Expenses						Soldiers' Own Expenses			
	Arches	Flags	Lanterns	Wines and Food	Miscellaneous	Total	Dinners and Entertainments	Distribution of Souvenirs	Miscellaneous	Total
	Yen	*Yen*	*Yen*	*Yen*	*Yen*	*Yen*	*Yen*	*Yen*	*Yen*	*Yen*
District A	....	....	....	2.00	0.50	2.50	3.00	....	....	3.00
District B	0.10	0.12	0.03	1.90	0.35	2.50	2.40	0.50	0.30	3.20
District C	....	0.15	....	0.50	0.20	0.85	0.50	1.00	0.20	1.70
District D	....	0.08	....	1.00	0.20	1.28	0.50	0.50	0.30	1.30
District E	0.20	0.03	0.30	0.03	0.07	0.63	0.20	0.06	0.20	0.46
District F	....	0.25	....	0.20	0.10	0.55	0.01	1.00	0.20	1.81
District G	....	0.50	....	10.00	3.00	13.50	3.00	2.00	1.00	6.00
City A	1.00	0.25	0.20	0.50	0.10	2.05	3.00	1.00	0.15	4.15
City B	....	1.00	....	....	....	1.00	2.50	....	....	2.50
Total	1.30	2.38	0.53	16.13	4.62	24.96	15.71	6.06	2.35	24.12

TABLE III.—STATISTICS OF EXPENSES PREPARED FOR A CERTAIN DIVISION IN THE NORTHEASTERN DISTRICTS

The following is the result of an investigation by an officer well acquainted with the local circumstances. The investigation is concerned with the expenses of the soldiers in the said division who belong to the middle class. The result is, we believe, quite approximate to the actual facts.

I.—Expenses of Soldiers, When They Enter Barracks

	Yen
(1) Expenses at the conscript examination.	
(a) Expenses for clothing (Conscripts take this opportunity to get new clothing made, not for this occasion alone, but for the marriage that they have in view.)	20.00
(b) Traveling expenses (Those who were schoolmates gather together on this occasion. They put up at the same hotel, hold meetings, take photographs, etc.)	3.00
(2) Expenses for dinner party (Just before or after the examination, friends visit the conscripts and participate in a dinner.)	8.00
(3) Expenses from examination to the entrance to barracks (Farewell meetings; visits to shrines or temples, or to relatives and friends, living far from the conscripts; the purchase of books necessary to the military life, etc.)	15.00
(4) The expenses at the time of entering barracks (Farewell meetings, traveling expenses, incidental expenses, etc.)	8.00
Total	54.00

II.—Expenses When They Leave Barracks

	Yen
(1) Purchase of souvenirs, etc. (Wine cups, tea trays, hanging pictures, etc.)	5.00
(2) Clothing (Most soldiers have their clothing already made at the time of the examination, and now they purchase hats, shoes or clogs, shirts, etc.)	5.00
(3) Dinners (Dinners and meetings of various sorts, when soldiers get home.)	10.00
Total	20.00

For Purchase of Souvenirs on Departure for Home

	Corps	Number of Soldiers	Amount of Money	Average per Head
			Yen	*Yen*
A	Infantry	746	1,971.14	2.64
B	"	720	3,999.90	5.50
C	"	410	1,464.50	3.57
D	"	710	962.25	1.35
E	Cavalry	...	....	5.00
F	Field Artillery	...	....	4.00
G	Engineering	...	....	5.00
H	Commissariat	281	95.00	0.35
I	Hospital	30	150.00	5.00
J	"	...	....	8.00
K	"	10	30.00	3.00

Note.—The average per head for E, F, G and J is a supposition by the authorities concerned. The small amount of H is due to the shortness of the term for service.

According to the table above, soldiers spend 3 to 4 *yen* on an average, in the purchase of souvenirs. But it happens frequently that they purchase them through the merchants or friends at home. Our estimate is, therefore, 5 *yen* per head.

Judging from the above, the least estimate of the expenses at the time of entering barracks must be 5 *yen* for clothing, 5 *yen* for dinners and another 5 *yen* for traveling expenses, etc., that is, 15 *yen* in all. About the same amount is spent at departure.

Few are the soldiers who wear uniform when they leave barracks for home. It is very often the case that, when they are about to leave barracks, they tease their parents or brothers into making a new dress that is in fashion. Do not say that it is only a suit of clothes. The very suit they obtain indicates their tendency to an extravagant life as the result of their living in towns or cities. Think of their influence upon the rustics.[1]

Infantry soldiers and medical privates serve in the army for two years. Hence, they need the amount of 15 *yen* twice —at their entrance into barracks the first year, and at their departure from barracks the second year. Soldiers of other special branches need it also twice, for their term extends over three years. The ratio of the distribution of the actives, according to the branches of the army, is four of the infantry

[1] Jiji *Shimpo*, December 3, 1913.

soldiers against one of other special branches. Besides, many supplementaries and transport auxiliaries incur expenses at their entrance and departure every year. Taking all these circumstances into consideration, we shall not be very far from the truth when we say that such an amount as the above is needed once every year. To avoid overestimate, let our estimate of the amount be 10 *yen* per head, every year.

Conclusion

We have studied under separate headings the different expenses incurred by our soldiers. Let us now sum up all the expenses in order to see how much is expended by each soldier. The common soldiers, whose number is the largest of all classes of military men, have the following expenses per head:

		Yen
A	Amount paid out by the national Treasury	About 140.00
B	Amount soldiers receive from home	" 30.00
C	Amount spent by soldiers at the entrance to and departure from barracks	" 10.00
	Total	About 180.00

When we turn our attention to the amount of the expenditure by the national Treasury for noncommissioned officers, we shall find that there is much difference between it and the corresponding amount for common soldiers, which we have seen above. But the difference is only that of salaries. The former, whose salary is about 110 *yen* per year, do not spend the whole of it, but send a part of it home for saving, as we have already seen to be the case. They do not receive money from home, nor incur any expenses at their entrance to and departure from barracks. But there is nothing different from the common soldiers in their living. As they are paid somewhat better than common soldiers, and are more free than they, these men may spend their money to a greater extent than the common soldiers. Taking these various circumstances into consideration, our estimate of the amount of the expenses per noncommissioned officer is that it is about equal to that of the common soldier.

	Yen
Amount paid out by the national Treasury	About 235.00
The amount sent home or saved	" 55.00
Balance	About 180.00

The conscript sailors do not, as a rule, receive any money from home, and almost the whole of their salary is spent upon themselves. As their term of active service extends over four years, the amount of their expenses at enrollment and at discharge is about one-half of the yearly average of common soldiers.

	Yen
Amount paid out by the national Treasury	About 187.00
Amount of expenses at enrollment and at discharge	" 5.00
Total	About 192.00

Noncommissioned officers of the navy spend by far a greater amount of money. But, in order to avoid any overestimate, let us estimate it to be about equal to that of the common sailors.

The estimate above has been of the average amount of expenses per head, both in the army and the navy. Below we give the estimate of the amount of expenses for all the men of the army and the navy:

The army	180 *Yen*	× 215,000 =	38,700,000 *Yen*
The navy	190 *Yen*	× 18,000 =	3,420,000 "
Total			42,120,000 *Yen*

The total of about 42,120,000 *yen* is being spent every year by the men of the army and the navy.

Expenditure per Head of Population

A Comparison of Expenditure Between Soldiers and Populace

It is not an easy thing to establish a comparison of expenditure between soldiers and populace. As we have, however, obtained the average amount per soldier, we shall perhaps be able to accomplish our object, if we can find the amount of the expenses of the populace; but this is almost impossible to

learn exactly. First of all, let us take it for granted that soldiers spend more money than common people, and then compare the necessaries of life for the common people with those of soldiers.

Rice.—With the common people, rice forms the staple food, but they usually mix it with wheat. It would be a luxury for them to feed on rice alone. On the other hand, the ration of rice per soldier was formerly 6 *go* per day; at present, it is slightly over 4 *go*, because wheat is now mixed with rice for hygienic reasons. The amount of cleaned rice consumed by a soldier in one year would then be about 1,530 *go* (that is, about eight bushels). But the common people consume about 1,000 *go* (that is, one *koku*, about five bushels) of uncleaned rice and the amount consumed by 54,000,000 of the population is 54,000,000 *koku*. Taking 1 per cent of this population to be children below seven or eight years of age, the average amount per head would be 1.1 *koku* (five bushels and a half).

Beef.—In the present state of living in Japan, beef is a luxury. The average quantity per soldier is about 22 *kin* (about 29.3 lbs.) a year. On the other hand, the average quantity per head of the population is as follows:

	Kin
1908	1.326
1909	1.369
1910	1.800
1911	1.400

The quantity of beef consumed by soldiers is then about fourteen or fifteen times as much as that consumed by the common people. Strictly speaking, the quantity of beef should be compared with the quotient divided by the number of consumers.

In the quantity of fish consumed, also, the common people are far below the soldiers.

Clothing.—We shall not be far from the truth when we say that the quantity of textile fabrics produced every year may well be regarded as indicating the quantity of clothing

used by the people. The quantity of textile fabrics consumed at home in 1912 was as follows:

Production	Imported	Exported	Home Consumption
Yen	*Yen*	*Yen*	*Yen*
337,230,151	20,280,379	57,540,177	299,970,353

That is, only 5.50 yen per head, while the average amount per soldier is usually above 30 yen, every year. If we add to the former amount the expenses for sewing and the profit that goes to retailers, even then we can not deny the great difference between the two.

The foregoing are only a few instances of many. In other various respects, too, soldiers are by far greater consumers than the common people. But we shall make a further investigation into this matter in order to ascertain as approximately as possible the degree of the difference. Let us now make an estimate of the expenses of soldiers when at home.

Classes to Which Soldiers Belong

In order to know the expenses of soldiers when they are at home, we must first look at the state of their distribution among the different social classes. Statistics of the conscript examination in the city of Kyoto in 1912 give us valuable information concerning the relation between physique and means of living, and the ratio of conscripts to the actives.

DIRECT NATIONAL TAX IN THE CITY OF KYOTO, LOWER DISTRICT

Physique	0	0–5	5–10	10–20	20–50	50–100	Above 100
	Yen	*Yen*	*Yen*	*Yen*	*Yen*	*Yen*	*Yen*
First class	234	16	8	31	33	17	9
Second " A	60	2	6	4	3	3	2
" " B	274	10	20	29	52	18	20
Total of eligibles	568	28	34	64	88	38	31
Third class	267	11	16	23	37	18	16
Fourth "	50	1	4	2	7	1	5
Total	885	40	54	89	132	57	52
Percentage of eligibles to conscripts	64.2	70.0	63.0	71.9	66.6	66.7	88.0
First class eligibles to conscripts	26.4	40.0	16.5	36.5	25.6	31.5	18.0

DIRECT NATIONAL TAX IN THE CITY OF KYOTO, UPPER DISTRICT

Physique	0	0–5	5–10	10–20	20–50	50–100	Above 100
	Yèn	*Yen*	*Yen*	*Yen*	*Yen*	*Yen*	*Yen*
First class	272	14	7	25	26	18	6
Second "	322	11	19	33	36	9	16
Total of eligibles	594	25	26	58	62	27	22
Third class	280	14	14	19	29	10	4
Fourth "	4	3	3	8	3	1	1
Total	938	42	43	85	94	38	27
Percentage of eligibles to conscripts	63.3	59.5	60.5	68.2	66.0	71.1	81.5
First class eligibles to conscripts	29.0	33.1	16.3	29.4	27.7	47.4	22.2

THE SUM TOTAL

First class	506	30	15	56	59	35	15
Conscripts	1,824	82	91	165	223	92	77
Percentage of first class eligibles to conscripts	27.7	36.6	16.5	33.9	26.5	38.0	19.6

If we classify the conscripts in the Lower District according to the standards of living recognized by the officials of the District Office, we shall get the following result. The division of the middle class into A and B is the author's. Payment of the national tax is the division line between the two.

STANDARD OF LIVING[1]

Physique	Higher	Middle A	Middle B	Lower
First class	15	95	127	113
Second class A	1	21	32	25
Second class B	23	111	141	130
Third class	23	98	138	135
Fourth class	5	13	30	27
Total	67	338	468	430
Percentage of first class eligibles to conscripts	22.4	28.0	27.4	26.3
Percentage of eligibles to conscripts	58.2	67.1	64.0	62.3

[1] Figures are based on materials collected by the City Office of Kyoto.

The percentage is greatest in the Middle A, which means that the largest percentage of the first class, and consequently of the active, belongs to the Middle Class A. The figures get smaller suddenly in the higher, while in the Middle B and the lower, they also fall off, but the difference between them and the Middle A is not very large. In other words, the first class eligibles, and consequently the actives, come from those classes who pay a national tax to the amount of 50 to 100 *yen*. The percentage of those who pay a national tax above 100 *yen* falls off considerably. On the other hand, the percentage of those who pay a tax of less than 50 *yen* falls off, but not so considerably as the former. The percentage of the actives to conscripts is 29.9 among those who pay the national tax below 100 *yen*, while the percentage among those who pay a tax above 100 *yen* is 19.6. The ratio is 3 to 2.

Our statistical investigation has so far been limited to one city only, but we think that in other cities there exist similar circumstances as regards the percentages given above. But in the provinces this is not necessarily true, for which there are two reasons. One is that the provinces are different from the cities in their various circumstances, especially in sanitary conditions, and the other is that the national tax in cities is usually the income tax or the business tax, while that in the provinces is mainly the land tax. In order to know the relation between the amount of the tax paid in the province and the physique of conscripts, we have to go to statistics of the localities concerned. For this purpose we quote the accompanying table from Lieut. Col. Motojiro Tanabe's work, entitled *History of the Japanese Army*. These statistics were prepared by him in 1906 for the Sakura Regimental District.

In spite of the differences in circumstances, the different classes of tax payers down "to below 100 *yen*" show comparatively slight differences in physique, while those who pay the tax "above 100 *yen*" fall far below, in the percentage of the first class conscripts. The highest percentage of those "below 100 *yen*" is 50.1, the average being 43.4. If we compare this average percentage with that of those "above 100 *yen*,"

RELATION OF PHYSIQUE OF CONSCRIPTS TO TAX PAID IN SAKURA REGIMENTAL DISTRICT, 1906

Amount of Tax	Number of Conscripts	First Class Conscripts		Second Class Conscripts		Third Class Conscripts		Fourth Class Conscripts	
		Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Yen									
0	2,560	983	38.4	822	32.1	555	21.7	200	7.8
Below 5	3,697	1,570	42.5	1,198	32.4	704	19.0	225	6.1
From 5–10	1,124	564	50.1	347	30.9	155	13.8	58	5.2
" 10–20	1,096	543	49.6	348	31.8	152	13.8	52	4.8
" 20–30	521	220	42.2	213	40.9	65	12.5	23	4.4
" 30–40	321	125	38.9	121	37.7	35	10.9	40	12.5
" 40–100	554	232	41.9	216	38.9	74	13.4	32	5.8
Above 100	92	27	29.4	35	38.0	26	28.2	4	4.3
Total	9,965	4,264	42.8	3,300	33.1	1,766	17.7	634	6.4

which is 29.4, we find the ratio to be 3 of the former against 2 of the latter, as was the case in Kyoto. Those who pay no national tax have a slightly lower percentage of first class conscripts than do those "below 100 *yen*," which was the case in Kyoto.

Granting that there are such differences in the percentage of first class conscripts among the different classes of tax payers, what will be the state of distribution of conscripts in general, among the different social classes? We have several statistical tables from different localities concerning this question, but we find statistics for the whole country entirely lacking. The only way left for us is first to classify the people according to their property and then to make an estimate of the number of conscripts, on the supposition that the birth rate in all classes is the same. Of course, the rate is greatest among the lower classes, but since the exact figures for the rate are not known, there is no way other than to suppose that they are the same throughout the different classes. We do not think that we can draw hard and fast lines between the different classes, according to their property. But we think that the classification of the people, according to the amount of their income, would lead us to a result quite similar to the classification according to property.

Even this classification according to income is not without difficulties. Needless to say, the statistics prepared by the government authorities concerning the income of the people are not accurate. And there are no statistics of any sort concerning the incomes below 300 *yen*. Not only that, but we have no means of ascertaining to whom belong such incomes as the interest on public or on company bonds, the profits of legal persons, etc. Our way of classifying the people is therefore only possible when we depend upon the so-called "third class income," by which is meant the incomes from salary. As will be seen later, the impossibility of locating certain incomes will not hinder us so much as appears at first.

CLASSIFICATION OF TAX PAYERS BY INCOME[1]

Approximate Income	Tax Payers	Total Income
Yen		*Yen*
300–500	695,108	200,556,498
500–1000	378,343	185,630,699
1000–2000	130,553	123,001,782
2000–3000	34,102	55,658,621
3000–5000	22,191	53,937,268
5000–10,000	11,107	44,496,043
10,000–15,000	2,493	16,939,147
15,000–20,000	873	8,348,716
20,000–30,000	533	7,597,317
30,000–50,000	304	6,507,316
50,000–100,000	98	3,826,140
Above 100,000	13	1,602,367
Total	1,275,718	708,101,914

Most of those whose income belongs to "the first" and "the second class income," pay the third class income tax also, and their income is above 500 *yen*. The actual number of those who receive an income above 300 *yen* and below 500 *yen* is, perhaps, not much different from the number on the table above. For the sake of convenience, from the total number of tax payers, let us subtract 695,108, being those with income above 300 *yen* and below 500 *yen*; then the balance of 580,610 will be those who pay tax above 500 *yen*. Following is a table showing the number of tax payers and houses in the whole country:[2]

Total number of houses	9,250,434
Total number of houses whose income is above 500 *yen*	580,610
Total number of houses whose income is below 500 *yen* and above 300 *yen*	695,108
Total number of houses, whose income is below 300 *yen*	7,974,716

Basing our investigation upon this table, let us see how the actives are distributed among the different classes of tax payers. Now, to which of the classes do those belong who pay a national tax above 100 *yen?* The classes to which they belong would be quite different, according to their calling, and according to whether they belong to cities or to rural districts. About 75 per cent of the total number of houses belongs to districts, and their chief tax is the land tax.

[1] Annual Report published in 1911 by the Revenue Bureau of the Finance Department.

[2] See the Thirtieth Annual Statistics of Japan.

And of those who pay the land tax, those having an income of 500 *yen* pay different national taxes to the amount of about 100 *yen*. Land owners are not confined to districts, but many of them live in cities. Besides, the land tax occupies a foremost part in the amount of the different national taxes paid in cities. In 1911 the number of those who paid a land tax was 9,300,578. These figures show that the number of land tax payers is greater than that of the houses in the whole country, which is 9,250,000. And this number of the payers of the land tax is more than double the number of houses of farmers that are in possession of arable land. The following is a table prepared in December, 1911, by the National Agricultural Association:

Number of farm houses	5,419,992
Number of land-owning and tenant farmers	2,155,763
Number of land-owning farmers	1,762,296
Number of tenant farmers	1,501,933

Such being the case, it is plain that there must be many land owners in the cities. This is the reason why the land tax occupies a foremost part in the total amount of national taxes in cities. The figures for the city of Osaka are as follows:

	Yen
Land tax	1,355,790
Income tax	1,783,808
Business tax	2,134,177
Total	5,273,775

Of the income of those who pay either a business tax or an income tax we can not make a general statement that is applicable to either of them, for the circumstances are different, according to the kinds of business tax. Those whose income is 1,000 *yen* do not pay, as a rule, more than 100 *yen* national tax. Those who get their income by labor must receive about 3,000 *yen* in order to pay 100 *yen* of income tax. Such differences as these among the payers of business tax and of income tax do not, however, make much difference in our inquiry. The percentage of the first class eligibles to those who earn their income by labor is much smaller than that of the first class eligibles to those who pay a national tax above

100 *yen*. The Saga Regimental Office gives the following figures concerning the percentage of the actives to those conscripts other than the actives:[1]

Trade of the Head of the Family	Percentage
Agriculture, and other primitive industries	29.2
Commerce	13.1
Manufacture	17.0
Commercial and manufacturing laborers	16.8
Professional labor	8.1

Excepting the merchants and manufacturers in cities, who do not live by labor, the ratio of the first class eligibles to the total number of conscripts will be 2, in the case of the conscripts from the houses whose income is above 500 *yen*, to 3 of those from other houses. If now we suppose that conscripts are called out from all classes alike, all the soldiers, including noncommissioned officers, may be classified as follows:

List of Army and Navy

Army:		
Soldiers	199,400	
Noncommissioned officers	16,500	215,900
Navy:		
Conscript sailors	17,800	
Other sailors	17,800	35,600
Total		251,500

Of about 10,000 noncommissioned officers of the navy, there may be some who were originally conscript sailors, which may be disregarded for the time being. The total number of the noncommissioned officers of the army, 16,500, excepting the one-year volunteers, may be regarded as belonging to the class whose income is below 500 *yen*, or below 300 *yen* even. The result will be somewhat as follows:

$2(581{,}000)+3(695{,}000)+3(7{,}975{,}000)=27{,}172{,}000$

$(199{,}400+17{,}800)\frac{2(581)}{27{,}172}=9{,}300$ (The amount of income above 500 *yen*.)

$(199{,}400+17{,}800)\frac{3(695)}{27{,}172}=16{,}600$ (The same above 300 *yen*.)

$(199{,}400+17{,}800)\frac{3(7{,}975)}{27{,}172}=191{,}300$ (The same below 300 *yen*.)

$191{,}300+16{,}500=207{,}800$ (The same below 300 *yen*, including noncommissioned officers).

We have yet no reliable statistics concerning household economy, but taking recourse to Western statistics, and to

[1] The table is for the District of Saga, in 1912.

some investigations made in our own country, narrow as the field may be, we shall find the different items of expenses to be in the following ratio: food, 5; habitation, 2; clothing, 1; fuel, 1; other necessities, 1.[1] Of these expenses, the greater part of those for food, clothing and other necessities may be saved when conscripts leave home for the army. As the number of inhabitants per house is 5.59 at present, we may consider the average per house, except little children, as being four persons. A quarter of the expenses, other than those for habitation and fuel, will then be saved by the enrollment of conscripts. Such being the estimate of the expenses of conscripts, the actual expenses of seven-eighths of all the conscripts when they are at home will not exceed 50 *yen*. Even in the case of those whose income is above 300 *yen* and below 500 *yen*, their expenses when at home will not be more than 70 *yen*, on an average. We can not estimate the average expenses of those whose income is above 500 *yen*, but their number is only one twenty-fifth of the total number of conscripts. Now, compare these estimates of the expenses of conscripts when at home with the preceding conclusion concerning their expenses when in the army or navy, and it will be enough to convince us that the conditions in the military life are much better than those in the life at home.

Summary

We have seen that the conditions among the army and navy men, during enrollment, are much better than the conditions when they are at home. There are yet two things that demand our attention: (1) The better life in the army will surely exercise its influence upon the life at home after the soldiers are discharged. All people experience difficulty in leading a life inferior to what they have been accustomed. It is natural that soldiers should desire to continue their better life even when they return home. And this will be more so, when they have got used to the city life and when

[1] *The Problem of Household Expenses*, prepared by the *Society for Sozial Politik*.

they have got into the habits of imitating a life of pleasure. (2) In addition to this tendency to raise the standard of living, the military life fosters the tendency to intensify one's desires, and wants are scattered and various in the ordinary life, while they become similar and uniform in the collective life of the army. Not only the quantity of consumable goods is large in the army, but the concentration of the desires for such goods is also intense in such a collective life. Now this concentration and uniformity of desires is one of the reasons for the creation of new employment in commerce and manufactures. It bears a close relation to what we observe in the next chapter concerning the national life.

CHAPTER VIII

SOCIAL EFFECTS

The economic effects of conscription upon the individual life of the nation are now our subject matter. Such effects are, of course, different, according to the social class to which an individual belongs. It is believed that the effects upon the higher classes are favorable, whereas they are unfavorable to the livelihood of those below the middle classes. Hence, our survey in this chapter falls naturally under the two headings, the effects of conscription that are favorable to the higher classes, and those that are not favorable to the lower classes.

Favorable Tendencies

The effects of conscription upon at least a part of the higher classes have been favorable when viewed from the economic and other points of view. The circumstances by which the favorable effects have been produced are, primarily, (1) the development of capitalism and (2) the purchasing and contract system.

The Development of Capitalism

That the development of those productive industries which require capital benefits the capitalists, is a matter of course. The system of conscription has contributed to its development, and is still contributing to it. Let us now see how this is so.

(a) Accumulation of Desires.—The system of conscription always brings with it the system of supplying soldiers with all that they need at government expense. Consequently, markets have to meet all the demands of soldiers, as one whole or as a few partial wholes. When they are at home, their demands are met by retailers. But when enlisted in the

army, their individual demands are collected into a great whole, which merchants and manufactures have to supply. Seventy per cent of the actives now belong to the agricultural classes who are yet self-supporting. Soldiers' demands upon merchants and manufactures have thus been accumulated into big wholes, and the quantity of their demands has also been increased.

(b) Accumulation of Capital.—Demands of munitions, consequent to the system of conscription, have contributed to the growth of large fortunes, almost to extremes. This has been especially the case in the past war, of which we do not like to make any detailed statements. But it is well known by all that Baron Iwasaki of Tokyo and Baron Fujita of Osaka are now in possession of large fortunes because they have been the suppliers of munitions. Let us quote from *The Millionaires of the Meiji Era*, by Gennosuke Yokohama:

> Many were the merchants of Osaka who left home for Kyushu during the Satsuma Rebellion. Denzaburo Fujita was the foremost of all those who profited by it. "What was the amount of the government expenses during the said war? Of the 41,500,000 *yen* of its expenses, 5,000,000 *yen* for arms and greater part of the expenditure for clothing came into the hands of the Fujitas. As for Iwasaki, he profited 3,000,000 *yen* from transportation and 700,000 *yen* as a government grant. His net profit was more than 4,000,000 *yen*.

Of those who gained great profits during the Russo-Japanese War, we may count such as Mitsui, Iwasaki, Fujita, Okura, the supplier of canned food, Takata, the merchant to the Navy Department, and many owners of ships and coal mines. It is said that the profits of these merchants from the said war, great as they were, were not so great as those from the Sino-Japanese War. This accumulation of large fortunes must be going on even in peace time, though the rate may not be rapid. In Japan, merchants under government patronage are usually regarded as coveting excessive profits, and typical of such merchants are the suppliers of munitions.

(c) Concentration in Towns and Cities.—We have already considered this in detail in Chapter II. The increase of population in cities and towns has no doubt encouraged the development of those productive industries that require

large capital by the accumulation of demands and by the supply of laborers.

(d) Growth of Desires.—Soldiers in cities and towns are under the influence of a vain and extravagant life. They are after fashions. When they return home, they are looked up to among the rustics. The new desires and wants that such soldiers carry with them spread among the provincials by the psychological process of "superiority imitation." The growth of such desires furnishes capitalist industry with wider fields.

Purchasing and Contract System

The purchasing and contract system that is now prevalent has also a tendency to profit the higher classes. In order to get rid of excessive profits to the merchants patronized by the government, and to facilitate business transactions on the part of the military authorities, the manufacture of munitions was committed to the care of the Military Department. Arsenals were established, in accordance with the Arsenal Regulations, enacted in April, 1900, by the Imperial Ordinance No. 159; the Provision Department, in accordance with the Provision Ordinance No. 23 and with the Provision Regulations. But arms and clothing that these arsenals and departments can not supply and the raw materials that are needed in their manufacture must be obtained either by purchase or by contract. In such cases, the military authorities seek their market among capitalists, because it is convenient to make the purchase or contract in large amounts. Legal qualifications for such purchase or contract are very simple, but, actually, it is only those who possess large capital that can meet the military demands. Although the authorities make efforts to obtain the necessary materials directly from the producers, yet they are limited to those who carry on productive industry on a large scale. Straw and hay, and a few other things, are almost the only materials supplied by individual producers through the trade associations. And this circumstance will continue for a long time yet. The greater the accumulation of individual desires, the greater

will be the amount of demands that are supplied, not by the ordinary merchants or manufacturers, but by great capitalists. The profits consequent to the system of conscription are thus absorbed by the higher classes, while the burden of conscription is heavy upon the lower classes, and very light upon the higher classes, as will be seen in detail in the following section.

Aggravation of Distress

The system of conscription is a great blow to the conscripts' families, especially to those families below the middle classes. Such families are deprived of their chief laboring members by the system. Besides, they have to send more or less money every month to their sons or brothers, while they are in the army. In case of war, it often happens that many of them are taken away from their families forever, and the pension is not sufficient for the support of their families. We are now to see these circumstances in detail.

Actives from the Lower Classes

The number of the actives from the lower classes will be determined by a definition of the general term "lower classes." If the meaning is fixed as above, then the distribution of the actives among the different classes that we saw in the preceding chapter will help us in our study of this subject.

In the preceding chapter, we have seen that about 208,000 of the noncommissioned officers and common soldiers belong to the families whose income is below 300 *yen*. In the present state of living in Japan, they shall be regarded as of the lower classes. It would be a great loss to their families if they were enrolled in the army, as they are. Now, the absolute number of such actives is, of course, important in our study, but the ratio of such actives to the members of the respective classes is a question still more important.

(1) Result of Conscript Examination in the City of Kyoto, 1912

	Higher	Middle A	Middle B	Lower
Percentage of first class conscripts..	22.4	28.0	27.4	26.3

(2) Result of Conscript Examination in Sakura Regimental District, 1906[1]

	Higher	Middle				Lower			Average
	Above 100 *Yen*	Below 100	Below 40	Below 30	Below 20	Below 10	Below 5	0	
Percentage of first class eligibles among conscripts.....	29.4	41.9	38.9	42.2	49.6	50.1	42.5	38.4	42.8

[1] Prepared by Lieutenant Colonel Tanabe.

Generally speaking, the ratio is smallest among the rich and greatest among the middle classes. This ratio goes down gradually, as the standard of living goes down, but it is far greater with the lower classes than with the rich. The ratio is especially small with the rich who have received higher education. Hence, we may say that the present system of conscription enlists a comparatively greater number of soldiers out of the middle classes, and exempts a great number of the higher classes. Of course, this circumstance is due to differences of physique, but it is recognized implicitly by all that it is also due to the discretion of the examiners in the conscript examination.

The table opposite shows that of those who belong to the higher or the lower classes, those who have received higher education are practically exempted from service.

There is, of course, no express provision in the conscription law to make lighter the burden of service for the rich. But the actual result shows that the rich who are entirely free from difficulties in living escape from conscription very often, while those whose families will suffer from difficulties when they are enrolled are enlisted to a great percentage. Not only that, but most of the conscripts from the higher classes enjoy the privilege of the one year volunteer service, because they are usually those who have completed the middle school course. They can easily pay the amount of money required by the government for the volunteer service. On the other hand, those who have much difficulty in gaining a livelihood have to spend two or three years in the army.

The Amount of Loss per Family Consequent to Enlistment

The amount of loss consequent to enlistment is to be considered from two viewpoints. One is the amount of the expenses of each soldier, not paid out of his salary but out of the money that he receives from home, and the other is the value of the loss of labor consequent to his two or three years' service in the army. Of course, the living expenses of each soldier are saved, so long as he is in service. As to the ex-

EFFECT OF EDUCATION ON EXEMPTION FROM CONSCRIPTION

	First Class Conscripts	Second Class Conscripts A	Second Class Conscripts B	Third Class Conscripts	Fourth Class Conscripts	Fifth Class Conscripts	Total	Ratio of First Class Divided by Total
Graduates of universities	0.07	0.14	0.24	0.40	0.19	0.11	0.19	$\frac{7}{19} = .37$
Those on equal footing with above	0.60	0.17	0.24	0.34	0.21	0.11	0.17	$\frac{6}{17} = .35$
Graduates of higher and technical schools	0.05	0.09	0.16	0.22	0.09	0.10	0.11	$\frac{5}{11} = .45$
Those on equal footing with them	0.07	0.17	0.28	0.32	0.18	0.13	0.18	$\frac{7}{18} = .89$
Those who have completed middle schools	1.56	2.15	2.96	3.16	2.27	2.72	2.27	$\frac{156}{227} = .69$
Those on equal footing	1.83	2.33	3.12	2.69	1.82	2.87	2.30	$\frac{183}{230} = .80$
Those completing higher primary schools	22.31	22.10	22.98	17.48	14.15	19.30	20.75	$\frac{2231}{2075} = 1.07$
Those on equal footing	10.12	9.34	9.09	8.58	6.77	9.40	9.28	$\frac{1012}{928} = 1.09$
Those completing ordinary primary schools	43.58	42.43	40.01	40.92	37.30	39.71	41.85	$\frac{4358}{4185} = 1.04$
Those on equal footing	7.00	7.00	6.94	8.25	7.76	9.51	7.53	$\frac{700}{735} = .95$
Those who have some knowledge of reading and arithmetic	10.47	10.73	10.59	12.63	14.52	11.35	11.27	$\frac{1047}{1127} = .93$
Illiterates	2.88	3.35	3.88	5.01	14.74	4.69	4.28	$\frac{288}{428} = .47$

penses that soldiers incur during their service, and those at their entrance to, and departure from, barracks, we are in a position to make an approximate estimate. We have already seen that the average amount of money that they receive from home is 30 *yen* per head. The average amount at the entrance and departure is about 10 *yen* per head, in which, however, those expenses paid by their relatives or friends are included. About one-half of this amount then is to be deducted. In other words, about 35 *yen* per year is to be paid out by each family when one of its members is enlisted. Of course, this is the average amount, and we are aware that in very rare cases some of the soldiers send part of their salary home.

The amount of labor lost by a family, one of whose members is enlisted, differs according to the class to which a soldier belongs. It is comparatively easy to make an estimate of the amount among the lower classes. And we can say beforehand that the amount is greater among the middle classes. There are many of the lower classes who do not depend upon employers for their livelihood, and this is especially the case among the agricultural laborers. But the income of such independent laborers will not be greater to any considerable extent than that of the employes. Such being the case, we wish to know first the wages of employes, and then to infer from them the amount of income lost by enlistment. According to an investigation concerning the wages of different laborers made in 1910 by the Agricultural and Commercial Department, the average, not weighted, of the wages of forty-two kinds, is .65 *yen*. The average may be somewhat less than that in the case of agricultural laborers, whose number is very large. Unless there has since been considerable change in the average, we may regard the average at present as being 65 *sen* or so. Deducting holidays, the working days throughout the whole year number 276, that is, 23 days per month. The yearly amount of a laborer's wage is then about 150 *yen*. This much is then lost to a family, one of whose members is enrolled. Besides, we must

take into consideration those circumstances in which some trades make it impossible for conscripts to engage in them, even previous to their enrollment, and after their discharge. This is especially the case with those soldiers who want new employment after their discharge. In cases like this, the amount lost will be more than the estimate above. In Japan at present, laborers, except skilled ones, receive the average wage when they reach the age of twenty.

But we must see how much of the living expenses per family will be diminished when one of the members is enrolled. Usually a conscript's family has, besides himself, one other male member (father or brother), who is able to work. Or, it is often the case with some families that the female members, including children, engage in work, when one of their members is enrolled. In such cases, the income may be increased, that is, its amount be greater than 150 *yen*.

In order to avoid an overestimate, let our estimate in such cases be about 200 *yen*. About 30 per cent of this amount, as we have seen to be the case in the preceding chapter, goes into the expenses of a conscript enrolled, which amount to 60 *yen* or so. The balance of what the enrolled soldier spends and of what his family saves would be about 90 *yen*, which is the amount of the loss to his family consequent to his enrollment. This is our estimate for the laborers. As to those above the middle classes, the amount of the loss will be greater, because the income from their labor is greater than that of the lower classes. Those of the higher classes who lead an idle life, and those students that have no calling of their own, must be excepted from our consideration.

Except those above the middle classes that live in cities, the size of Japanese families is still large. Therefore, they do not suffer very much, even when one of their members is enrolled, because they have some other male members that can take up his work. If, on the contrary, such members are lacking, then it must be a great hardship upon the family, especially upon the families in the rural districts. In cities, women or children may engage in retail business, or be em-

ployed in factories. The case is quite otherwise in the agricultural districts. Women and children may be of some help only when they have the chief laborer. It is often the case in the districts that all the members of a family are left helpless when the male member is enrolled.

Postponement of and Exemption from the Calling Out

The twenty-second article of the Conscription Law now in force runs as follows:

> If there is confirmed evidence concerning the helplessness of the family when he is called out, postponement will be granted at his own request. In case the said circumstance still exists, even after three years, he will be registered in the militia service.

Now it may be thought that conscripts can be granted postponement or exemption when their family can not subsist without them. The law seems to provide for such cases, although this is so only in appearance. According to the annual report of the Educational Department for 1911, about 1.3 of the children of school age are not able to attend school because of poverty. On the other hand, the annual report of the Military Department tells us that for the three years, 1908 to 1910, only 5 10,000 of the conscripts of the first, second and fifth classes were exempted from enrollment for the same reason. Is this not a strange situation? It is often the case that those houses that produce conscripts have male laborers besides them, while those houses that have children of school age are in lack of male laborers except the father, the grandfather being dead and the brothers being yet too young. But such circumstances alone would not be sufficient to explain this discrepancy between 1.3 per cent and 5 10,000.

The loss of labor can be endured, if it is only for the two or three years that conscripts have to spend in the army. But how will it be if they are killed on the battle field or are disabled? Is this not a permanent loss of labor, wholly or partially? Of course, the system of pensions and aids provides for such cases. Soldiers below noncommissioned officers will be granted pensions, "when they are exempted from

Table of Pensions at Exemption

Official Grade	Noncommissioned Officers			Soldiers and Sailors			
Number of Years Served	Second Class	Third Class	Fourth Class	First Class Sailors	Higher Privates and Second Class Soldiers	First Class Soldiers and Third Class Sailors	Second Class Soldiers and Third Class Sailors
	Yen	*Yen*	*Yen*	*Yen*	*Yen*	*Yen*	*Yen*
Eleven years, or below eleven years	90	80	70	60	55	50	45

Aids to Widows and Orphans[a]

Official Grade	Noncommissioned Officers			Soldiers and Sailors			
Class	Second Class	Third Class	Fourth Class	First Class Sailors	Higher Privates and Second Class Soldiers	First Class Soldiers and Third Class Sailors	Second Class Soldiers and Third Class Sailors
First	90	80	70	60	55	50	45
Second	60	54	48	42	38	34	30
Third	30	27	24	21	19	17	15

[a] The bereaved family of those killed on battle fields receive the aid of the first class, and that of the killed in other ways, that of the second class.

service owing to wounds received, whether in war time or in peace time, by which they have lost more than one limb." "When they are killled in battle, or die from wounds, their bereaved widows or orphans are entitled to aid."[1] But will the amount of pensions and aids be sufficient?

The amount of pension for the first class soldiers, when disabled, is only about 50 *yen*, and that of aids to the bereaved family of the first class soldiers, when killed in battle, is only about 50 *yen*; in case they die of sickness while on the battle fields, their family receives only about 35 *yen*. The following are statistics prepared in 1912:

Pension Regulations	Kinds of Pension	Noncommissioned Officers		Soldiers	
		Number	Amount	Number	Amount
			Yen		*Yen*
	Exemption pension	20,380	1,702,000	53,449	2,742,508
	Additional pension	1,429	64,625	13,908	411,058
	Aids	13,335	787,277	77,133	3,152,699
The Army Pension Regulation, issued in 1876	Pension to wounded	137	8,368	637	31,206
	Aids	141	6,659	206	7,091
The Officers Aids Regulation, issued in 1875	Aids to wounded	6	620	43	1,433
	Aids in case of death	19	889	42	1,232
Aids Regulation, No. 4, issued in 1891	Aids	227	11,836	1,055	35,593
Total		35,674	2,582,274	146,473	6,382,820
	Total number of men, except those receiving additional pension	34,245	....	132,565	....

$\frac{2,582,274}{34,245} = 75$ *yen* $\frac{6,382,820}{132,565} = 49$ *yen*

Now could the amount of pension or aids, which we have seen to be some 50 *yen* per disabled soldier or per bereaved family, make up for the loss of labor per male? It is but natural that the families of the disabled or the killed suffer distress.

[1] Soldiers Pension Regulations, Articles 5, 27 and 31.

The Patriotic Ladies Association made an investigation concerning the families of the disabled and the killed, dividing them into the following classes: (1) those in want of daily sustenance; (2) those in poverty, though having slight means of gaining daily sustenance; (3) those in possession of slight means of livelihood; (4) those in possession of sufficient means of livelihood. The association regards those of the first and second classes as needing help, and is giving a little help to them, but it leaves the third and fourth classes to themselves, as needing no help. The number of those who receive more or less help from the association, according to the standards above, is 83,465 throughout the whole country, that is, about one-half of the whole number (34,245+132,565=168,810) of those who receive pensions or aids, and 63 per cent of those soldiers the amount of whose pension or aids is smallest. This shows how hard is the life of the families of the disabled and the killed.

Summary

The effects of the system of conscription upon the livelihood of the people are now sufficiently clear. That the greatest number of the actives come from the lower classes, that their families suffer from the double effects of the loss of labor and of the amount of money that they have to send to those enrolled, and that postponement or exemption is only apparent, and not actual, except in very rare cases,—all these circumstances show that the largest number of the lower classes suffer most from the effects of conscription. Of course, there are certain reasons which make us think that the system is favorable to better living, but this is the case only with the higher classes who are armed with large fortunes. The number of the enrolled among those above the middle classes is comparatively small, because they escape from enrollment by reason of weak physique, of studies pursued abroad, or of the discretion in the conscript examination. But almost all those who belong to the lower classes have not the benefit of these reasons and are enrolled, to the aggravation of distress.

CHAPTER IX

CONCLUSION

We now hasten to our conclusion. Let us sum up what we have seen of the economic effects of conscription upon the people. At the beginning of our survey, we said that we should not touch upon the question of its effects, through international relations, upon the economic life at home. That question will also be excluded from our concluding remarks.

The system of conscription robs our productive world of its most valuable laboring power. If the laborers were not enrolled as soldiers, they would engage in productive work, to the increase of our national wealth, because there is every opportunity for them to get employment. As we have seen already, there are some reasons that make us admit the increase of efficiency, as a result of conscription. But this may well be ignored, when we see that more than two hundred thousand of the most able bodied workers are turned to such unproductive work as the military service. Besides, the calling out of such able bodied men causes a greater amount of consumption than there would otherwise be, which means that so much of the national wealth is wasted. Not only that, but soldiers, once under the influence of the extravagant life of the cities, can hardly get rid of the unwholesome habit, even after their return home. And their influence upon their neighbors can but be deplorable.

As to the effects of conscription upon population, there are two contrary facts,—the increase and the decrease of population. And it is difficult to state the net result. But, if we take the effects of war into consideration, it is plain that conscription causes the decrease of population. The concentration in towns, caused by the existence of troops, has some good effects, because it encourages the commerce and manufactures of those places. When we come to the effects upon the livelihood of the people, we see that they are worst

upon the lower classes. It seems as if conscription were the sole duty of the lower classes. Even the most needy have almost no means of escaping conscription. The provisions in the law concerning the privileges of postponement and exemption are almost empty words, as regards the utterly destitute people.

Some students of economics think that the only effects of armaments, that is, of conscription, upon our economic life are those connected with the diminution of productive labor, that the military expenditure has no considerable effects because all the moneys paid out by the military authorities come back to the people, and that the expenses find, in many cases, their equivalents in goods.[1] It is true, of course, that the greater part of the military expenses comes back to the people and that large quantities of goods are gained as the equivalent of those expenses. But such reasons as these are not sufficient to justify the position that the military outlays have no effects upon our economic life.

True, the military expenditures have their equivalent in goods. But we must not forget that those goods are mostly consumable goods. Besides, such goods, except clothing and provisions, can only be used for military purposes, and do not therefore contribute to the national wealth. If the amount of the productive labor spent in producing such unnecessary consumable goods were turned into the production of some other goods of economic value, how great would be the benefits to the nation! Moreover, there are many cases in which productive commodities, such as land, are converted into consumable goods, in order to make the unproductive use for the army. Thus, the people are doubly robbed of their productive activity.

Even granting that all the military expenses return to the people in the end, we can not say that they have no economic effects. The military expenses, especially in the rapid expansion of armament, cause the overissue of currency, on the one hand, and the increase of taxes, on the other. The in-

[1] Colonel SATO, *History of the National Defense of Japan*, vol. II.

crease of the indirect tax, especially, causes an increase of the expenses of production, and thereby causes a rise of prices. The former also encourages this tendency of the rise of prices not only directly, but also indirectly, because the amount of commodities purchased with the military outlays are not used as productive capital. This is especially the case with extraordinary military expenses. Now, there is no question that this artificial rise of prices is harmful to the international economic relations.

Such being the case, we can not think, as some do, that the only economic effects of the military expenditures are the loss of the productive labor of able bodied men. But we have not discussed effects other than the loss of productive labor and the increase of consumption, only because the other effects can not be considered as the direct effects of the system of conscription, although they may be regarded as effects of the military expenditures. Besides, such effects can only be discussed theoretically, and can not be treated statistically.

INDEX

Agriculture, effect of conscription, 108–109; decrease of employment in, 109–110; increase of employment with demand for forage, 115, 118; concentration of agricultural laborers in cities, 160–161; effect of Russo-Japanese War on, 163; labor by women and children, 168; increase of farm houses in Hokkaido (1904–1916), 173; National Agricultural Association, 219; percentage of the actives to those of conscripts other than actives engaged in, 220.

Agricultural laborers, concentration of, in cities, 160–162; excess of, 168; numbers of (1904–1911), 169; reasons for concentration in cities, 171; wages of and amount lost by conscription, 230.

Akita, deficit in rice crop in (1905), 164.

Aomori, number of marriages (ages 15–29) in, 80; deficit of rice crop in (1905), 164.

Arsenals, at Tokyo, 120, 127; at Osaka, 120, 127; establishment of, 225.

Artillery, organization of, 9; number of sections, 15, 37, 39; increase of (1900), 47; present size, 53; location of regiments, 99; reason for large percentage of crime among, 141–142; expenses of soldiers in Eighteenth Division of, 197.

Asahigawa, division at, 131.

Asano, population of (1896–1899), 105.

Australia, wool imports from, 122.

Beef, quantity consumed by soldiers and people, 212.

Barley, amount purchased, 116; increase in production, 118; area (1897–1916), 165.

Birth rate, decrease due to barrack life, 76–77, 82; decrease due to Russo-Japanese War, 82; increase with the development of conscription, 82; per 1,000 population (1872–1911), 83; in city and country, 161.

Bonin Islands, conscription in, 68.

Bushi, (anti-military class), 3–4, 6.

Cavalry, number of regiments, 15, 37, 39; increase of, in 1896, 45; in 1900, 47; present size, 53; location of regiments, 99; savings of soldiers of Eighteenth Division, 190; monthly average proceeds of sutlers and salaries of soldiers of Sixteenth Division, 194; proceeds of sutlers in the Sixteenth Division from, 196; expenses of soldiers in Eighteenth Division of, 197.

Chiba, railway regiment at, 131.

China, Japanese army stationed in (1900–1903), 47; number of horses used by troops in, (1910–1912), 112.

Chishima, conscription in, 68.

Clothing, average amount per soldier and common people, 213.

Clothing Department, 119, 126, 192; goods furnished to (1913), 121; number of workmen in, 127; supplies needed by, 131.

Coast Artillery, number of corps, 15, 37.

Colonial troops, number of battalions, 37, 39; increase of, in 1899, 47.

Commissariat, number of sections, 15, 37; term of service, 20; increase in 1896, 45; in 1900, 47; present size, 54; location of regiments, 99; reasons for large percentage of crime among, 140; savings of soldiers of 18th Division, 190; monthly average proceeds of sutlers and salaries of soldiers of 16th Division, 194; proceeds of sutlers in the 16th Division from, 196; expenses of soldiers in 18th Division, 197.

Communication corps, present size, 54.

Conscription, law and origin, 3; in France and Prussia, 3; objections to, 4; Imperial mandate (November, 1872), 4; reasons for, 6–7; organization of, 9; Conscript Regulations, 9–10; provisions of law of 1873, 11–13, 187; amendments (1873–1875), 15; (1879), 19–20; numbers of conscripts (1873–1877), 16–17; proportion of conscripts to population, (1873–1877), 17; changes in system and reasons, 17–18; law of 1883, 26–27; amendments to law, (1883–1889), 33–35, 42–43; number of conscripts (1878–1884), 39; proportion of conscripts to males of conscript age and population (1878–1886), 39; changes in law, 44–45; number of conscripts

(1905–1912), 53; proportion of conscripts to population and to males of conscript age (1905–1909), 55; law of 1906, 55; influence on economic conditions, 73; importance of, 74; effects on population, 74–75; effect on birth rate, 79–80; effect on death rate, 83–84; effect on migration to cities, 87; concentration of soldiers in towns, 89–90, 167; effect on agricultural employment, 108–109; effect on merchants, 118–119, 128; effect on commercial and manufacturing employment, 132; effect on character of conscripts, 136–137, 142; degree of scholarship among conscripts (1908–1910), 144–145; effect of physical training, 146, 151; effect on number of laborers, 152; percentage of conscripts having education of elementary grade (1909–1910), 153–154; number of actives, 156; number of men lost to productive labor by, 157; loss of labor days by, 157–159; condition of conscripts in Meiji Era, 186; tendency to raise standard of living and intensify desires, 222; effect on development of productive industries, 223; effects of demands for munitions on accumulation of capital, 224; effect on family of conscript, 226; result of conscript examination in city of Kyoto (1912), 226; result of conscript examination in Sakura (1906), 227; large proportion of middle classes selected for, 228; percentage conscripted from various classes, 229; postponement of, where proposed conscript is needed by family, 232.

Criminals, barred from service, 13, 23, 52, 61, 138; criminal percentage in a regimental district (1912), 137; percentage of prisoners between ages of 20–40 (1905–1907), 138.

Death rate, annual, ages 25–35, (1908–1909, 1898–1899), 84; per 1,000 women, (1898–1908) ages 26–30, 85; in city and country, 161.

Defense guards, number of corps, 37; present size, 54.

Discharged Soldiers' Association, work of, 152.

Education, among soldiers, 143; degree of scholarship among conscripts (1908–1910), 144–145; percentage of conscripts having (1909–1910), 153–154.

Ehime, increase in rice crops in, 164.

Employment, occasioned by proximity of regiments and divisions, 131–132; by conscription system, 132.

Engineers, number of sections, 15, 37, 39; increase in 1896, 45; in 1897, 47; present size, 54; reasons for large percentage of crime among, 140; savings of Eighteenth Division, 190; monthly average proceeds of sutlers and salaries of soldiers of Sixteenth Division, 194; proceeds of sutlers in the Sixteenth Division, 196; expenses of soldiers in Eighteenth Division, 197.

Enrollment, postponement or exemption caused by death or sickness, 13–14, 22, 35–36, 62; other exemptions from, 14, 22–23, 29–31; revision of rules of, 43; rejection from, because of imprisonment, 61; exemption from, by money payment, 65; exemptions from, of certain professions and those with social standing, 65–66; privileges given university graduates and certain classes of students, 66–67.

Esashi, conscription in, 68.

Exemption: from service, 23 *et seq.*, 31 *et seq.*; 36, 51–52, 62; revision of rules of, 43; under conscription law of 1873, 62; of 1879, 62–63; of 1883, 63–64; of 1889, 64–65; where family needs conscript, 232.

Expenses: of training soldiers, 187–188; of training noncommissioned officers, 188; of training sailors and noncommissioned naval officers, 189; of soldiers at sutlers, 194 *et seq.*; boarding expenses of soldiers, 202; other, 203, 230; statistics of Second Division concerning, 203; at entrance and departure in a certain prefecture, 204; greatest amount of expense for each item, 205; average amount of expense for each item, 206; smallest amount of expense for each item, 207; statistics of expenses prepared for a certain division in the northeastern districts, 208; for purchase of souvenirs on departure for home, 209; of common soldier, 210; of noncommissioned soldier, 210–211; of sailors, 211; of noncommissioned officers of navy, 211; ratio of different items of, 221.

Exports, increase of (1904–1905), 180.

Factory Investigation Committee, report of, 182.

Feudal system, decay of, 3–4; unpopularity of, 7.

Fish, quantity consumed by people and soldiers, 212.

Formosa, 110, 174; soldiers in, 45; standing army, 54; number of military horses in (1910–1912), 112.
Fortress artillery, number of battalions, 39; increase of, in 1896, 45.
Fudeoka, population (1897–1911), 105.
Fujita, Baron, munitions manufacturer, 224.
Fukuchiyama, regiment at, 195.
Fukui prefecture, number of sojourners (1911), 91.
Fukuoka prefecture, actives, active reserves, reserves and male population, 96; ratio of two reserves to the actives, 96; ratio to male population, 96.
Fukushima, number of marriages, ages 15–29, 80; deficit in rice crop (1905), 164.
Fukuyama, conscription in, 68; population and increase (1894–1903), 100.

Gendarmes, number of battalions of, 37, 39.
Gifu prefecture, number of sojourners (1911), 91; population before and after establishment of regiments (1903–1908), 102.

Hagino, number of military horses (1910–1912), 112.
Hamamatsu, population before and after establishment of regiments (1903–1908), 102.
Hay, amount purchased, 117; increased production, 118; obtained through trade associations, 225.
Himeji, population and increase (1894–1903), 100.
Hirosaki, population and increase (1894–1903), 100; population before and after establishment of regiments (1903–1908), 102.
Hakodate, conscription in, 68.
Heavy Artillery, 54.
Hiroshima, garrison at, 15; artillery regiment at, 131.
Hitaka, conscription in, 68.
Hokkaido, organization of army in (1875), 16; conscription in, 68; oats raised in, 116, 120; hay grown in, 117, 120; increase of area of dry and wet fields in (1904–1910), 172; increase of agricultural houses in (1904–1910), 173.
Horses, demand for military purposes, 111–112; Administration Regulations, 111; Horse Supply Bureau, 111; average number of horses per day (1910–1912), 112; life of, 113; purchases (1910–1912), 113; officers', 114; total number in country and number produced (1907–1910), 114; number requisitioned during Russo-Japanese War (1902–1906), 114; Military Horse Supplement Department, 115; allowance per day for, 116; allowance for 38,000, 116; used in cultivation of wet and dry fields (1904–1910), 170.
Horse Supply Bureau, work of, 111; at Shirakawa and other towns, 112; supply of forage by, 115.
Hyogo prefecture, number of sojourners at (1911), 91; comparison of actives and population with Kyoto (1909), 92.

Ibaraki, deficit of rice crop in (1905), 164.
Iburi, conscription in, 68.
Imperial Guards, 42; makeup of, 16, 37, 39; conscription law for (1875), 18; term of service of, 20.
Imperial power, move toward restoration of, 4–5; decline of, 6.
Infantry, organization of, 9; number of regiments, 15, 37, 39; increase in 1896, 45, 99–100; present size, 53; location of regiments, 99; physique of soldiers (1909–1910), 147–148; savings of soldiers of Eighteenth Division, 190; salaries and sutlers' average proceeds from Sixteenth Division, 194–195; proceeds of sutlers in Sixteenth Division, 196; expenses of soldiers in Eighteenth Division, 197.
Ishikawa prefecture, number of sojourners (1911), 91; comparison of actives and population with Kyoto (1907), 92.
Ishikari, conscription in, 68.
Iwasaki, Baron, munition manufacturer, 224.
Iwate, number of marriages (ages 15–29) in, 80; deficit in rice crop (1905), 164.

Jimmu, Emperor, 6.

Kagawa, increase of rice crop in, 164.
Kagoshima, population and increase (1894–1903), 100.
Kanazawa, population and increase (1894–1903), 100.
Kawakami, number of military horses (1910–1912), 112.
Keio Era, French officer as advisory councilor during, 7.
Kitami, conscription in, 68.
Kobe, actives, active reserves, reserves and male population, (1911), 95;

ratio of two reserves to actives, 95; ratio to male population, 95; wages of day laborers (1900–1912), 177.
Kochi, population and increase (1894–1903), 100.
Kofu, population before and after establishment of regiments in (1903–1908), 102.
Kokubudai, artillery regiments in, 131.
Kokura, actives, active reserves, reserves and male population, 96; population and increase (1894–1903), 100.
Korea, 110, 174; standing army at, 54; number of military horses (1910–1912), 112.
Kotohira, population (1902–1908–1911), 200; money orders cashed by soldiers at (1897–1909), 200–201.
Kumamoto, garrison at, 15.
Kurume, actives, active reserves, reserves and male population, 96; population and increase, (1894–1903), 100; population before and after establishment of regiments (1903–1908), 102.
Kushiro, conscription in, 68; number of military horses (1910–1912), 112.
Kyoto, number of marriages (ages 15–29), 80; number of men in service and percentage of total population, 81; number of soldiers from country in (1910), 91; comparison of actives and population (1907), 92; comparison of actives and population with Shiga (1909), 92; comparison of actives and population with Hyogo (1909), 92; soldiers in the districts of (1910), 92; boarding expenses of soldiers in, 202; direct national tax (Upper and Lower District), 214; result of conscript examination in the city of (1912), 226.
Kyushu, location of Eighteenth Division, 191.

Laborers; increased skill obtained by conscription, 143; effect of conscription on numbers of, 152; total taken from productive labor by military life, 157; loss of time to, by conscription, 159; increase in wages of, and comparison with average increase in prices of foodstuffs (1900–1912), 177; wages of day (1900 and 1912), 177; lack of male, 178–179; yearly increase of, 179; numbers in commercial and manufacturing, 180–181; scarcity of, 181–182; methods employed to attract, 182–183; kidnapping of, 183; loss of those conscripted, 228, 237–238.
Loochoos, conscription in, 68.

Manchuria, 110; standing army in, 54; number of military horses (1910–1912), 112.
Marriages, number of (ages 15–29), 80.
Masuda, Captain, estimate of boarding expenses, 203.
Matsumoto, population before and after establishment of regiments (1903–1908), 102.
Matsuye, population before and after establishment of regiments (1903–1908), 102.
Medical corps, 53; physique of (1909–1910), 147–148.
Meiji Restoration, aim of, 3–4; effect of, on conscription, 5; control of military system by French during, 7; millionaires of, 224.
Military Horse Supplement Department, farming work of, 115.
Military towns, formation and expansion of, 99 *et seq.*
Mitsui, 224.
Miyagi, number of marriages (ages 15–29), in, 80; deficit in rice crop (1905), 164.
Miyakonojo, population before and after establishment of regiments (1903–1908), 102.
Moji, actives, active reserves, reserves and male population, 96.
Money orders, amounts paid on, 200.
Morioka, cavalry regiments at, 131.
Mountain artillery, present size, 54; savings of soldiers of Eighteenth Division, 190; expenses of soldiers in Eighteenth Division, 197.
Muhara, number of military horses (1910–1912), 112.
Musicians, number of corps, 37, 39; present size, 54.

National Agricultural Association, table on number of farm houses and land-owning and tenant farmers, 219.
Nagoya, garrison at, 15; wages of day laborers (1900 and 1912), 177.
Nara, population before and after establishment of regiments (1903–1908), 102.
Narashino, cavalry regiments at, 131.
Nemuro, conscription in, 68.
Niigata, deficit in rice crop (1905), 164.

Oats, amount purchased, 116; increased production, 118.
Ogasawara, enforcement of conscription, 68.

Ohmura, population and increase (1894–1903), 100.
Oita, population before and after establishment of regiments (1903–1908), 102; increase of rice crop, 164.
Okayama, population before and after establishment of regiments (1903–1908), 102.
Okinawa, enforcement of conscription in, 68.
Okuma, Count, 48.
Okura, canned food manufacturer, 224.
Omura, Masujiro, advocate of conscription, 7.
Orphans, pension to, 232 *et seq.*
Osaka, 10; garrison at, 15; number of marriages (ages 15–29), 80; sojourners at (1911), 91; raw material sent to (1910–1911), 120; number of workmen in arsenal at, 127; conscription in, 154; wages of day laborers (1900 and 1912), 177; high expenses of soldiers stationed at, 195; boarding expenses of soldiers at, 202; land, income and business taxes in, 219.
Oshima, conscription in, 68.
Oyama, number of military horses (1910–1912), 112.

Patriotic Ladies Association, investigation of families of disabled and killed, 235.
Pensions, under Conscription Regulation, 10, 232 *et seq.;* inadequacy of, 226; table of, and aids to widows and orphans, 233; number and amount of (1912), 234.
Population, effect of conscription on increase of, 76 *et seq.*, 224, 236; effect of conscription on urban, 87; increase in towns with newly organized regiments, 100; increase in towns of 10,000 to 40,000, 101; before and after establishment of regiments in certain towns, 102; increase in places where new divisions and new regiments were formed, 103; increase throughout towns, garrisoned by new divisions, 103; increase in towns, not garrisoned by new divisions, 103; increase in smaller towns, 103; of Zentsuji (1896–1912), 105; of neighboring towns and villages (1897–1911), 105; percentage of inhabitants in various cities, towns and villages to the whole, 161; increase of absolute city population, 174–175.
Provision Bureau, 119, 126; goods furnished to (1913), 121; number of workmen in, 127; supplies needed by, 131.
Punishment, for infractions of rules for enrollment, 14–15; 26, 32, 52.

Reserve service, rules of, 12, 21, 34; changes in 44; annual inspection of, 158.
Rice, amount purchased, 122–123; area of fields and comparison with previous year (1897–1909), 163; total crop (1897–1909), 164; relationship of area of other fields and rice, 166; consumption of, by soldiers and people, 212.
Russo-Japanese War, 44, 49, 53; increased need for conscription after, 55; decrease of birth rate during, 82; casualties of, 83; horses requisitioned during, 114; effect on agricultural labor, 163, 165; number of soldiers used in, 179; merchants who profited by, 224.

Sabaye, regiment at, 196.
Saga, suppression of insurrection at, 42; population before and after establishment of regiment at (1903–1908), 102; figures of Regimental Office concerning the percentage of the actives to those conscripts other than actives, 220.
Saghalien, standing army at, 54.
Sakade, population (1902–1908–1911), 200; number of money orders cashed by soldiers at (1897–1909), 200.
Sakura, relation of physique of conscripts to tax paid in (1906), 216; result of conscript examination in (1906), 227.
Sanbongi, number of military horses (1910–1912), 112.
Sasebo, population (resident and foreign, 1898–1912), 88.
Satsuma Rebellion, 8, 41, 57; importance of, 19.
Sendai, garrison at, 15.
Senju Woolen Factory, 119, 126, 192; wool purchases of, 122; number of workmen at, 127.
Service, term of conscript, 10, 28, 57–58; kinds of, 11, 20, 27, 33, 49–50; specialization in, 11–12, 20–21, 27–28, 33–34, 50; supplementary, 12–13, 21, 28, 48, 50; active, 59–60; reserve, 60; supplementary reserve, 60–61.
Shichinonel, number of military horses (1910–1912), 112.

Shiga prefecture, number of sojourners, (1911), 91; comparison of actives and population, with Kyoto, (1909), 92; increase in rice crop, 164.
Shikamura, population (1897–1911), 105.
Shimonoseki, artillery regiments at, 131.
Shimoshidzu, artillery regiments at, 131.
Shirakata, population (1897–1911), 105.
Shirakawa, military horses (1910–1912), 112.
Shiribeshi, conscription in, 68.
Shizuoka, population and increase (1894–1903), 100; increase in rice crop, 164.
Shogunate party, 41–42.
Sino-Japanese War, 44–45, 48; increase of military force after, 56, 84, 99; profiteering of merchants during, 224.
South America, wool imports from, 122.
Straw, amount purchased, 117; increased production, 118; obtained through trade associations, 225.
Sutlers, activities of, 124–125; profits of, 126; average amount expended by soldiers per day at, 141; proceeds of, from Eighteenth Division, 194 *et seq.*

Tadotsu, population (1897–1911), 105.
Takanabe, number of military horses in (1910–1912), 112.
Takata, population before and after establishment of regiments (1903–1908), 102.
Takata, merchant supplying Navy Department, 224.
Tanabe, Lieutenant Colonel Montojiro, 37; on taxes, 215; table on result of conscript examination in Sakura (1906), 227.
Taxes, direct national tax in Kyoto, 213–214; relation of physique of conscripts to tax paid in Sakura (1906), 216; number paying, 218; land, 218–219; income and business, 219; increase of, due to conscription, 237–238.
Telegraph corps, number of, 37, 39.
Teshio, conscription in, 68.
Tochigi, deficit in rice crop in (1905), 164.
Tokachi, conscription in, 68.
Tokushima, population before and after establishment of regiments (1903–1908), 102; increase in rice crop in, 164.
Tokyo, garrison at, 15; marriages from ages 15–29, 80; married and unmarried men and percentage with regard to rest of country, (ages 19–24), 81; percentage of men of age in service, 81; number of actives, active reserves, reserves and male population (1910), 94; ratio to male population of actives, active reserves and reserves, 94; rate of removal to (ages 5–45), 97; raw materials sent to arsenal at (1910–1911), 120; number of workmen in arsenal at, 127; division at, 131; wages of day laborers, (1900–1912), 177.
Tottori, population and increase (1894–1903), 100.
Toyama, population before and after establishment of regiments (1903–1908), 102.
Toyohara, population (1897–1911), 105.
Toyohashi, population before and after establishment of regiments (1903–1908), 102; cavalry regiments at, 131.
Tsu, population before and after establishment of regiments in (1903–1908), 102.

Utsunomiya, population before and after establishment of regiments (1903–1908), 102.
Uzuhiko (governor of Katsuragi), 6.

Volunteers, 28–29; 34–35; one year, 50–51.

Wages, 187; of soldiers under Conscription Regulation (1870), 10; under Conscription law (1873), 12; increase in, of laborers in comparison with average increase in prices of foodstuffs (1900–1912), 177; of day laborers (1900–1912), 177; rise of (1916), 180; of noncommissioned officers, 191; during calling out, 194; of soldiers of Sixteenth Division, 194; of noncommissioned officers of Sixteenth Division, 195; average of different laborers, 230.
Wakamatsu, population before and after establishment of regiments (1903–1908), 102.
Wakayama, population before and after establishment of regiments (1903–1908), 102; increase of rice crops in, 164.
Wheat, amount purchased, 122–123; area of (1897–1910), 165.
Widows, pensions to, 232 *et seq.*

Yamagata, Aritomo, 48; constructor of conscription system, 7; results of tour of inspection of European systems, 17–18.
Yamagata, number of marriages in (ages 15–29), 80; population and increase (1895–1903), 100; deficit in rice crop in (1905), 164.
Yamaguchi, population and increase in (1894–1903), 100.
Yokohama, wages of day laborers (1900–1912), 177.
Yokohama, Gennosuke, 224.
Yokosuka, artillery regiments at, 131.
Yoshida, population (1896–1899), 105.
Yoshiwara, population, (1897–1911), 105.
Yura, artillery regiments at, 131.

Zentsuji, population and increase (1894–1903), 100; (1902–1908–1911), 200; growth of population due to establishment of a new division at, 104–105; increase of employment due to establishment of a new division at, 128–129; higher officers stationed at, 130; money orders cashed by soldiers (1897–1909), 200–201; boarding expenses of soldiers at, 202.

Date Due

S 24 '40
APR 15 '41
DEC 22 '41
Ap 18 '44
DEC 28 1944
MAY 2 1945
JUL 9 1945
MAR 20 '51
APR 22 '52
MAR 22 '55
DEC 6 '55

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